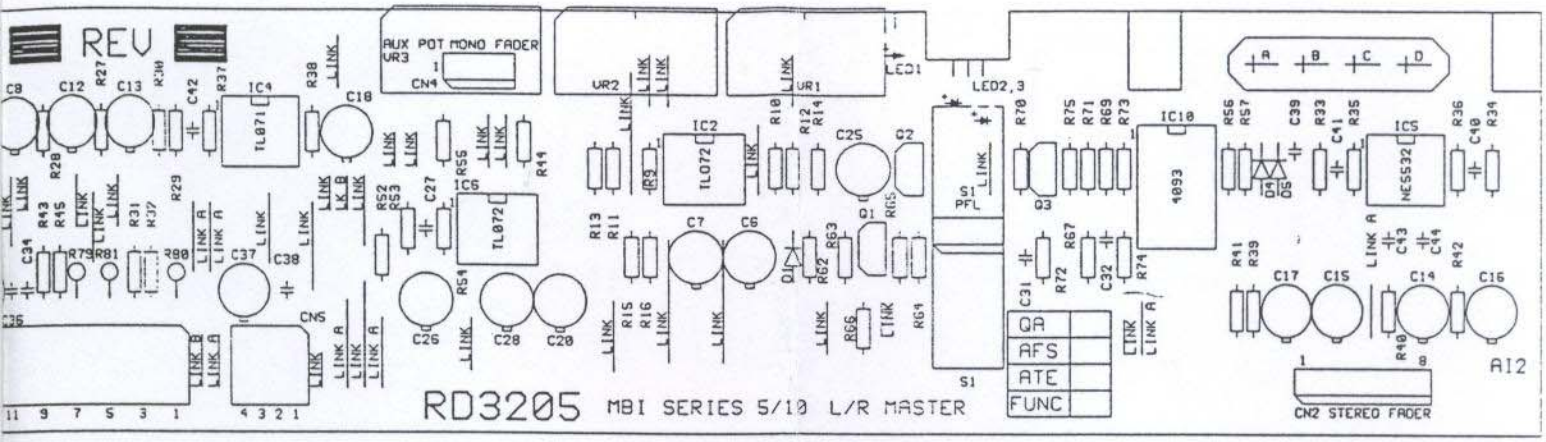
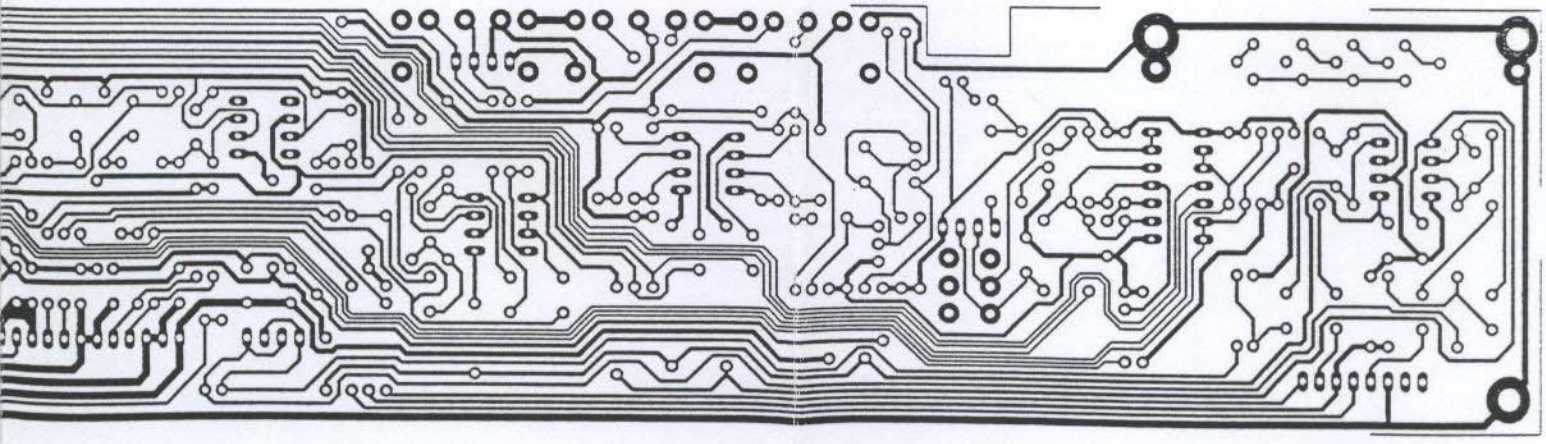

REV
AUX POT MONO FADER
VR3
CN4
VR2
VR1
LED1
LED2,3
IC4
TL071
IC2
TL072
IC6
TL072
IC10
1093
IC5
NE5532
CN5
CN2 STEREO FADER
S1
QA
AFS
ATE
FUNC
RD3205 MBI SERIES 5/10 L/R MASTER
A12



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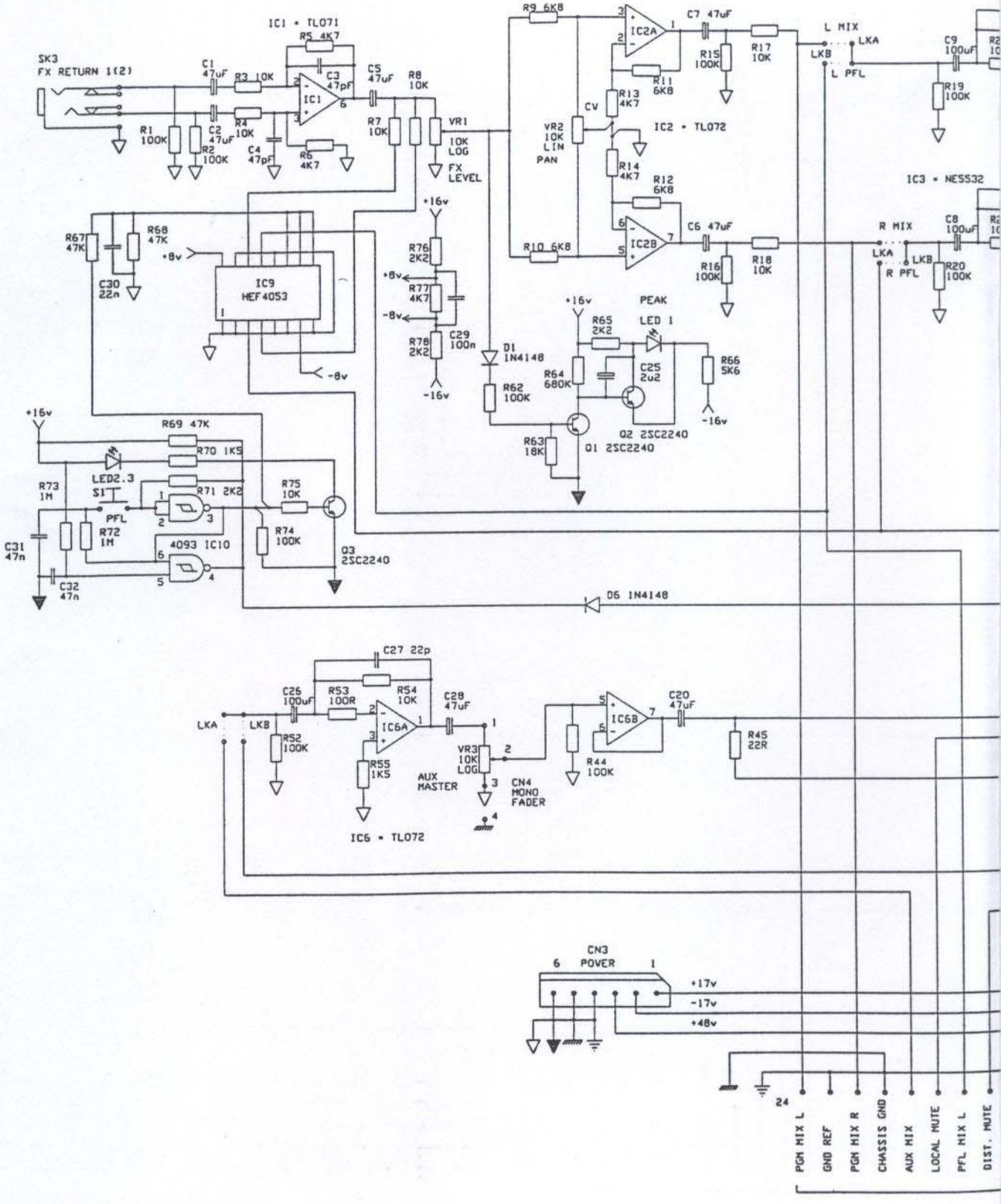

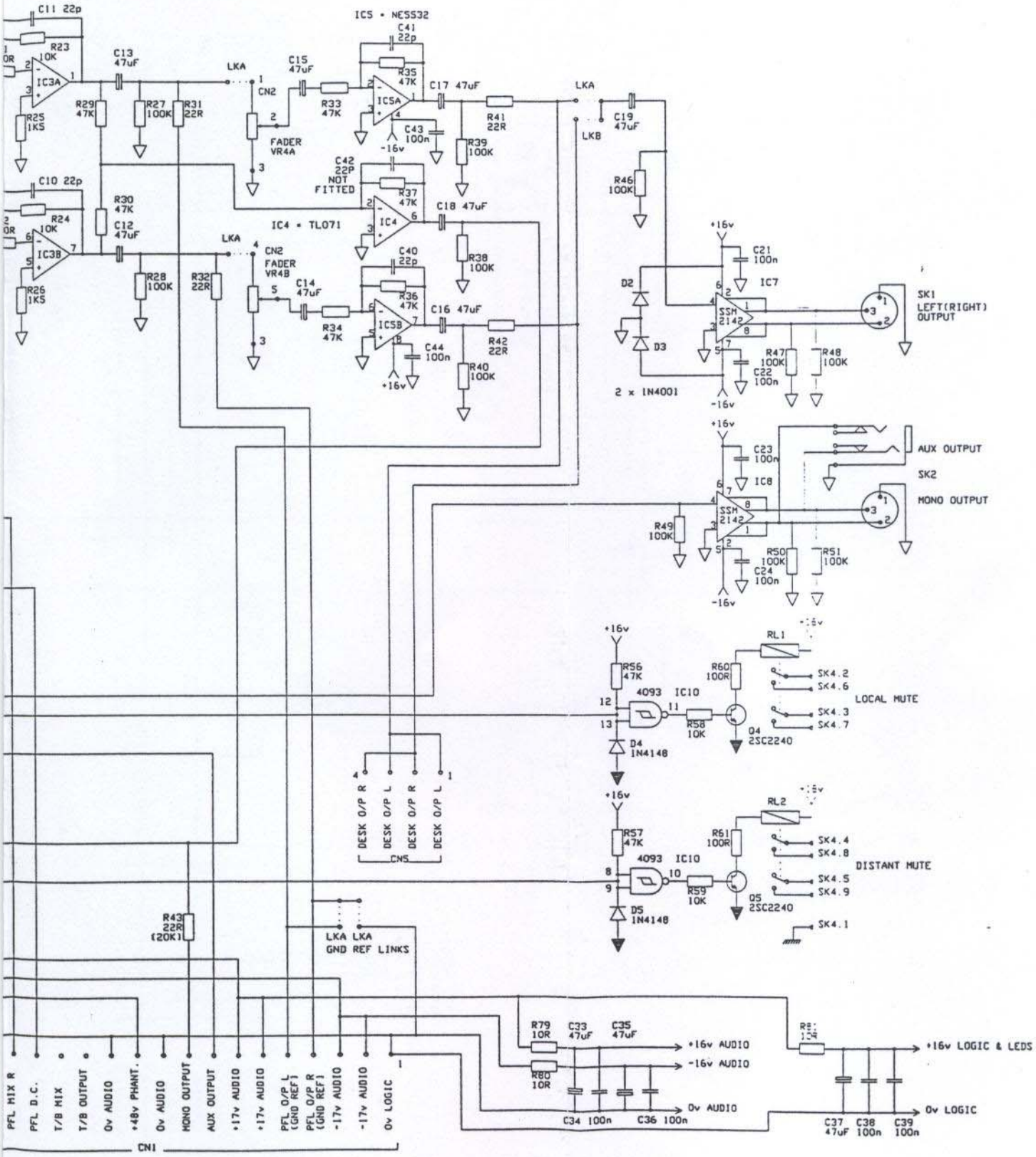
C11 22p
R23 10K
IC3A
C13 47uF
LKA
C15 47uF
IC5 = NE5532
C41 22p
R35 47K
IC5A
C17 47uF
LKA
LKB
C19 47uF
R29 47K
R27 100K
R31 22R
R25 1K5
CN2
R33 47K
FADER VR4A
C43 100n
-16v
R41 22R
R39 100K
C42 22P NOT FITTED
R37 47K
IC4
C18 47uF
R46 100K
C10 22p
R24 10K
IC3B
R30 47K
C12 47uF
IC4 = TL071
LKA
CN2 FADER VR4B
C40 22p
R36 47K
IC5B
C16 47uF
R38 100K
R28 100K
R32 22R
C14 47uF
R34 47K
R26 1K5
C44 100n
+16v
R40 100K
R42 22R
+16v
C21 100n
IC7
D2
D3
2 x IN4001
SSM 2142
SK1 LEFT(RIGHT) OUTPUT
R47 100K
R48 100K
C22 100n
-16v
+16v
C23 100n
IC8
AUX OUTPUT
SK2
MONO OUTPUT
R49 100K
SSM 2142
R50 100K
R51 100K
C24 100n
-16v
+16v
RL1
RS6 47K
4093 IC10
R60 100R
SK4.2
SK4.6
LOCAL MUTE
SK4.3
SK4.7
R58 10K
Q4 2SC2240
D4 IN4148
DESK O/P R
DESK O/P L
DESK O/P R
DESK O/P L
CN5
+16v
RL2
R57 47K
4093 IC10
R61 100R
SK4.4
SK4.8
DISTANT MUTE
SK4.5
SK4.9
R59 10K
Q5 2SC2240
D5 IN4148
SK4.1
R43 22R (20K)
LKA LKA
GND REF LINKS
R79 10R
R80 10R
C33 47uF
C35 47uF
+16v AUDIO
-16v AUDIO
0v AUDIO
C34 100n
C36 100n
+16v LOGIC & LEDS
0v LOGIC
C37 47uF
C38 100n
C39 100n
PFL MIX R
PFL D.C.
T/B MIX
T/B OUTPUT
0v AUDIO
+48v PHANT.
0v AUDIO
MONO OUTPUT
AUX OUTPUT
+17v AUDIO
+17v AUDIO
PFL O/P L (GND REF)
PFL O/P R (GND REF)
-17v AUDIO
-17v AUDIO
0v LOGIC
CN1

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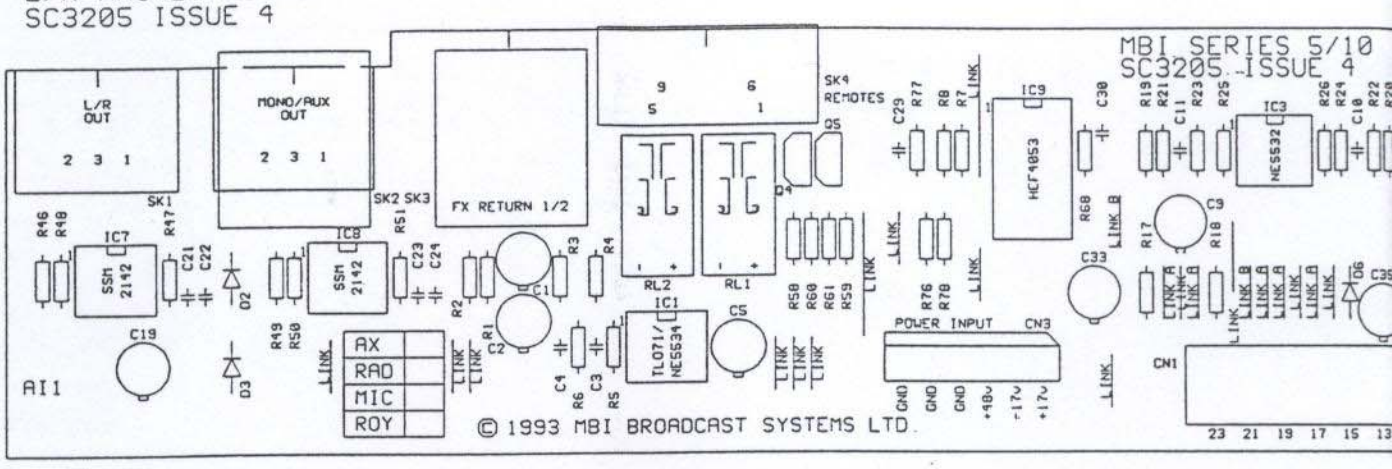
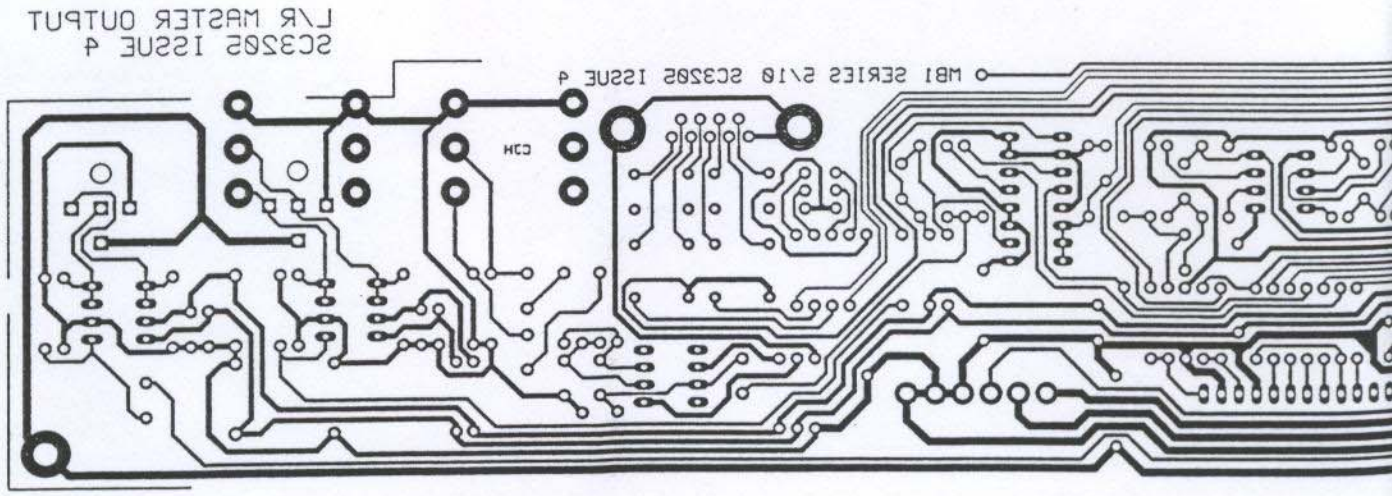
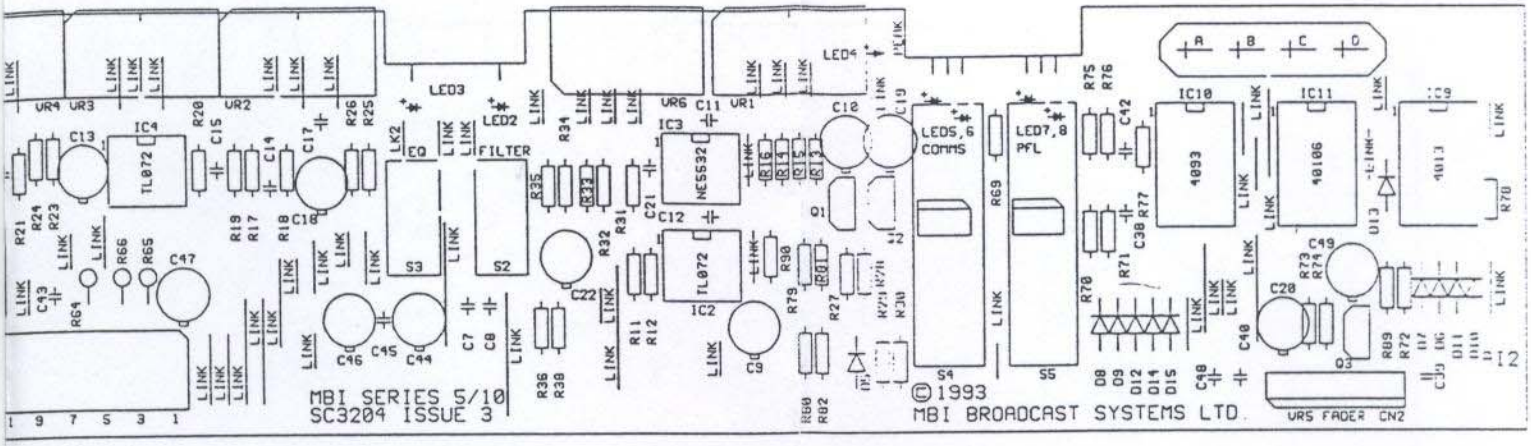
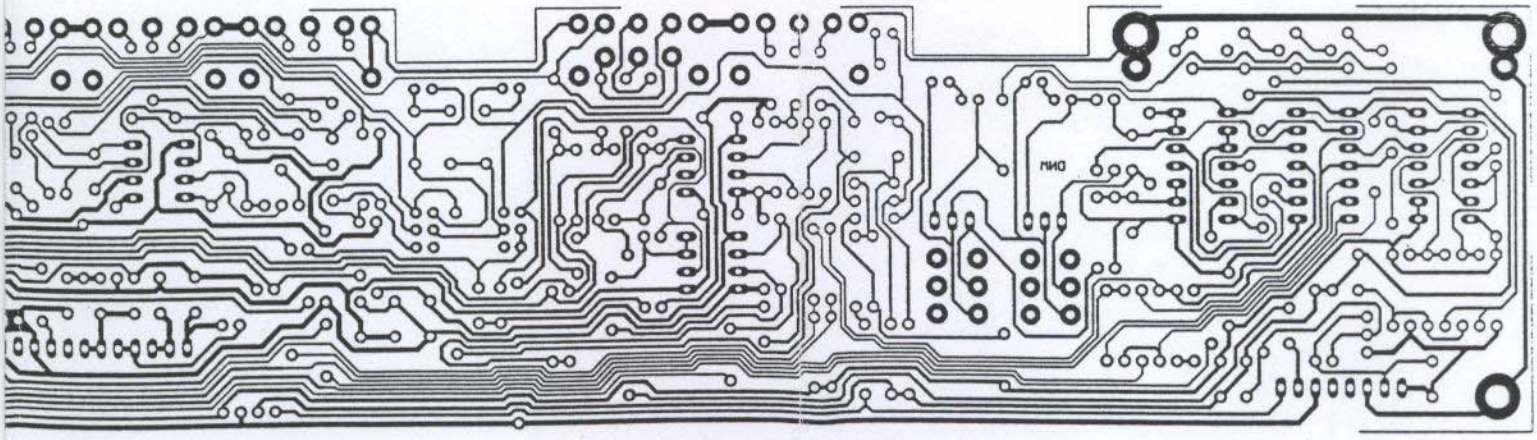
L/R MASTER OUTPUT
SC3205 ISSUE 4






MBI SERIES 5/10
SC3204 ISSUE 3
©1993
MBI BROADCAST SYSTEMS LTD.
VR5 FADER CN2
LED5,6
COMMS
LED7,8
PFL
FILTER
EQ
IC1
IC2
IC3
IC4
IC10
IC11
TL072
NE5532
4093
40106
S2
S3
S4
S5



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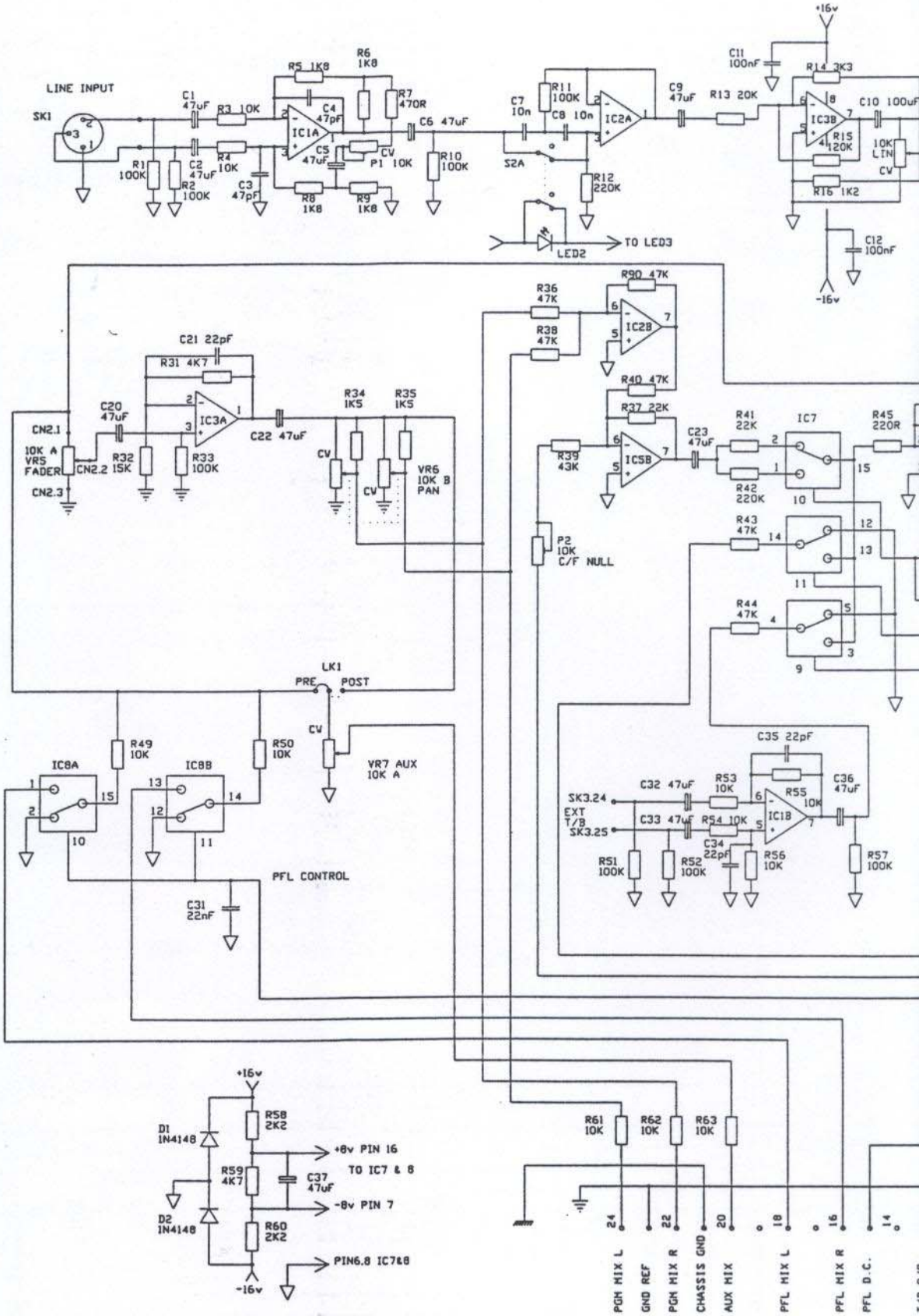

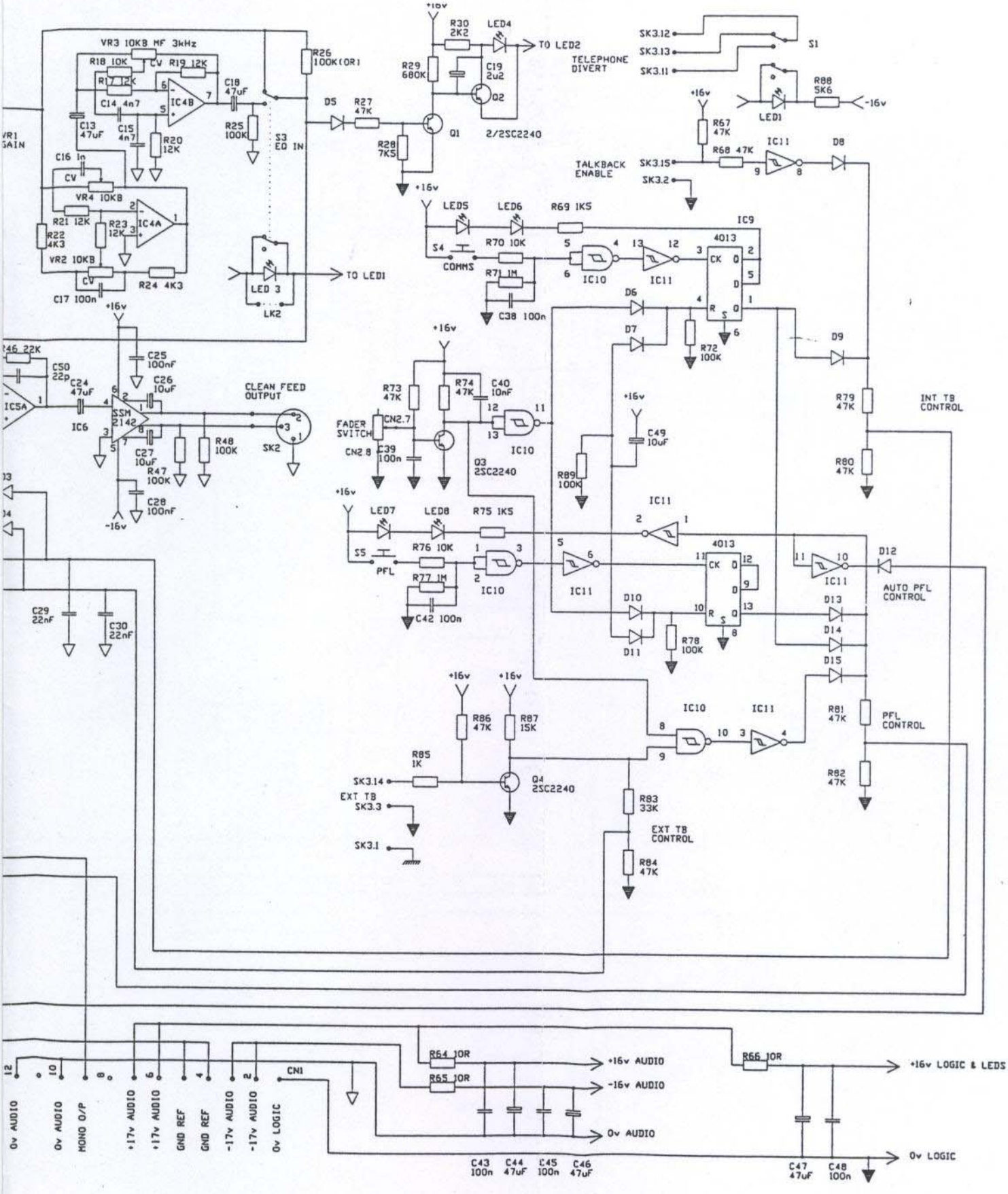
VR3 10KB MF 3kHz
R18 10K
CV R19 12K
R17 12K
C14 4n7
IC4B
C13 47uF
C15 4n7
R20 12K
C18 47uF
R25 100K
R26 100K(OR)
S3 EQ IN
C16 1n
CV
VR4 10KB
R21 12K
R23 12K
IC4A
R22 4K3
VR2 10KB
CV
R24 4K3
C17 100n
LED 3
LK2
TO LED1
+16v
R30 2K2
LED4
TO LED2
R29 680K
C19 2u2
Q2
D5
R27 47K
Q1
2/2SC2240
R28 7K5
TELEPHONE DIVERT
SK3.12
SK3.13
SK3.11
S1
R88 5K6
-16v
LED1
R67 47K
R68 47K
IC11
D8
TALKBACK ENABLE
SK3.15
SK3.2
LED5
LED6
R69 1K5
IC9
4013
S4
COMMS
R70 10K
IC10
IC11
R71 1M
C38 100n
D6
D7
R72 100K
D9
R79 47K
INT TB CONTROL
R80 47K
C25 100nF
C26 10uF
C24 47uF
IC6
SSM 2142
CLEAN FEED OUTPUT
SK2
R48 100K
C27 10uF
R47 100K
C28 100nF
-16v
R73 47K
R74 47K
C40 10nF
FADER SWITCH
CN2.7
CN2.8
C39 100n
Q3 2SC2240
IC10
C49 10uF
R89 100K
LED7
LED8
R75 1K5
S5
PFL
R76 10K
R77 1M
C42 100n
IC10
IC11
4013
D10
D11
R78 100K
D12
AUTO PFL CONTROL
D13
D14
D15
C29 22nF
C30 22nF
R86 47K
R87 15K
R85 1K
SK3.14
EXT TB SK3.3
SK3.1
Q4 2SC2240
IC10
IC11
R81 47K
PFL CONTROL
R82 47K
R83 33K
EXT TB CONTROL
R84 47K
CN1
0v AUDIO
0v AUDIO
MONO O/P
+17v AUDIO
+17v AUDIO
GND REF
GND REF
-17v AUDIO
-17v AUDIO
0v LOGIC
R64 10R
R65 10R
+16v AUDIO
-16v AUDIO
0v AUDIO
R66 10R
+16v LOGIC & LEDS
0v LOGIC
C43 100n
C44 47uF
C45 100n
C46 47uF
C47 47uF
C48 100n

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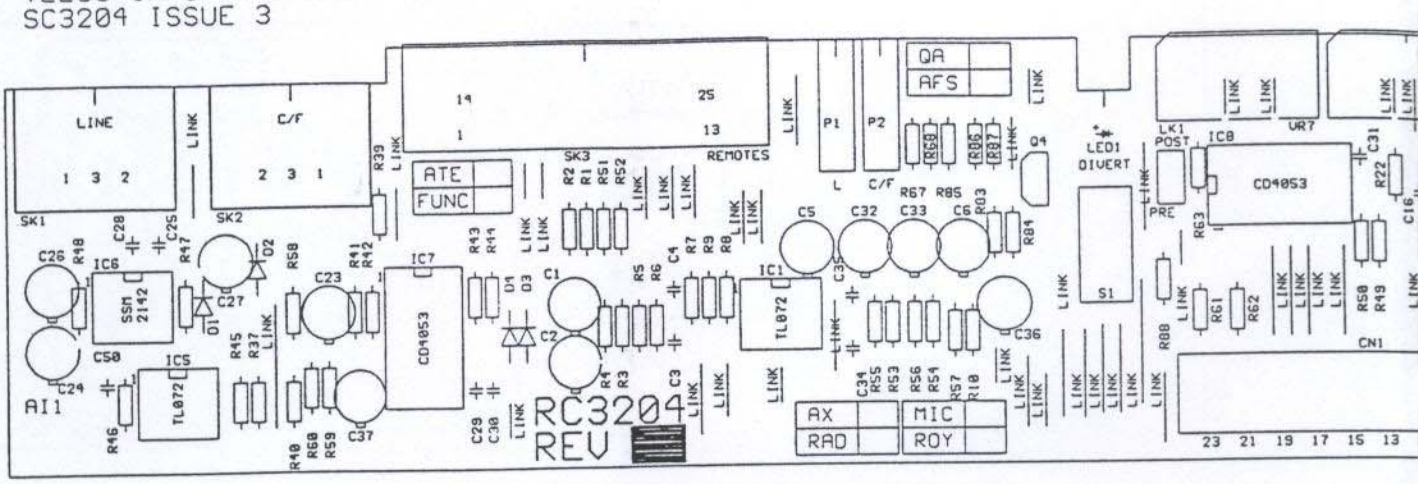
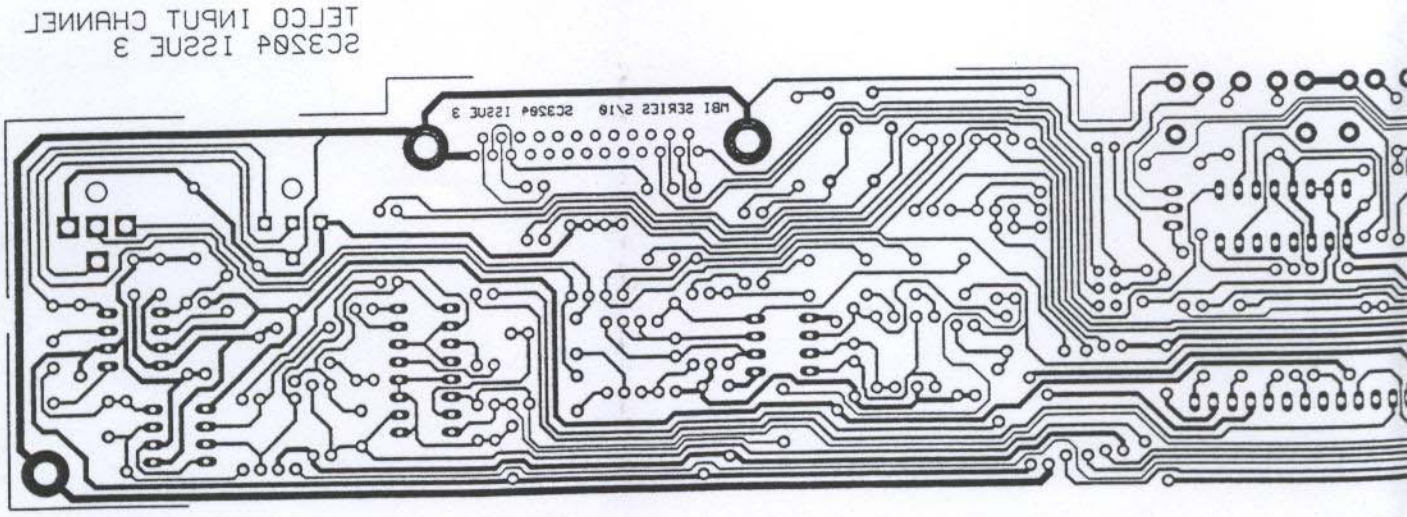
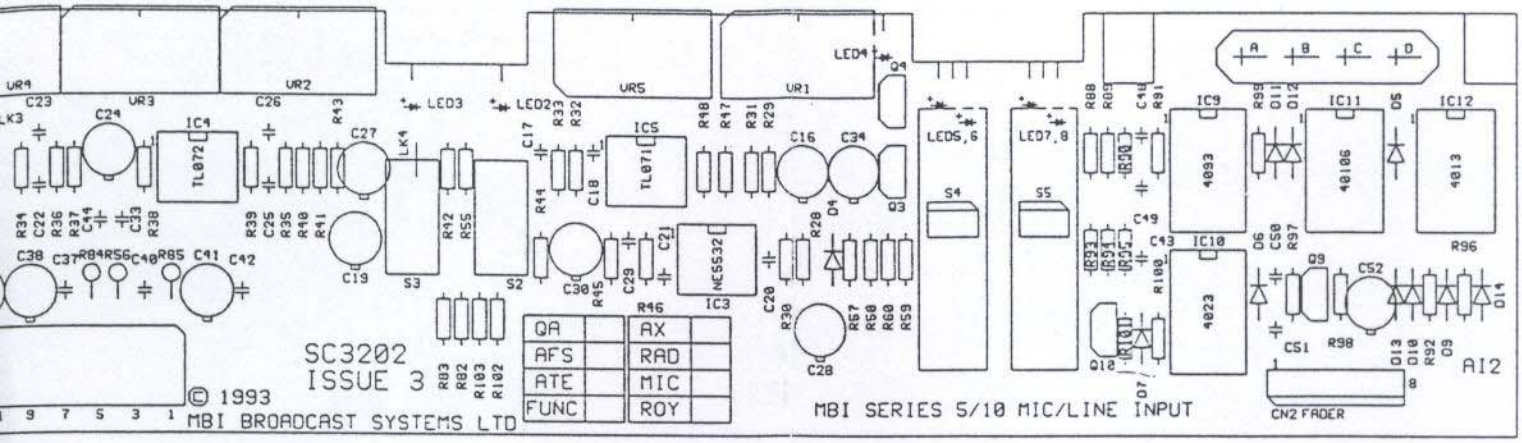
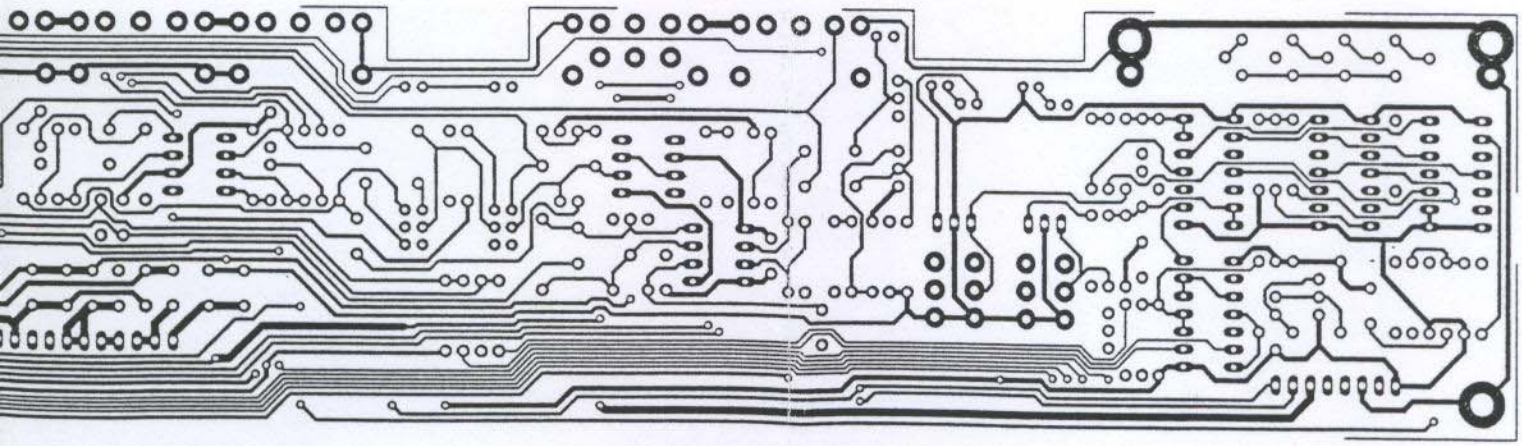
TELCO INPUT CHANNEL
SC3204 ISSUE 3






SC3202
ISSUE 3
© 1993
MBI BROADCAST SYSTEMS LTD
MBI SERIES 5/10 MIC/LINE INPUT
QA
AFS
ATE
FUNC
AX
RAD
MIC
ROY
A
B
C
D
IC4
TL072
IC5
TL071
IC3
NE5532
IC9
4093
IC11
40106
IC12
4013
IC10
4023
LED3
LED2
LED4
LED5,6
LED7,8
S1
S2
S3
S4
S5
VR1
VR2
VR3
VR4
VR5
CN2 FADER
AI2



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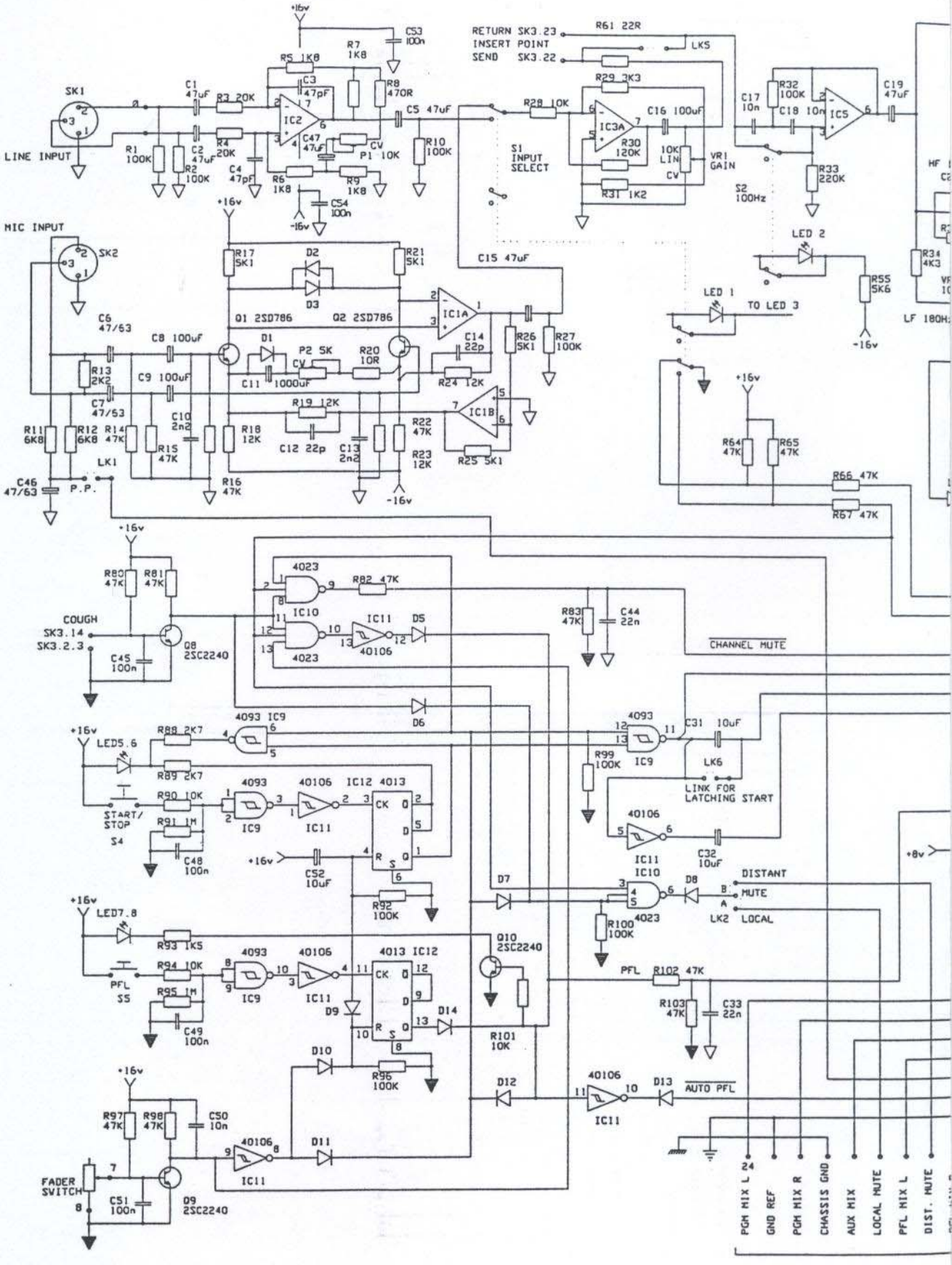

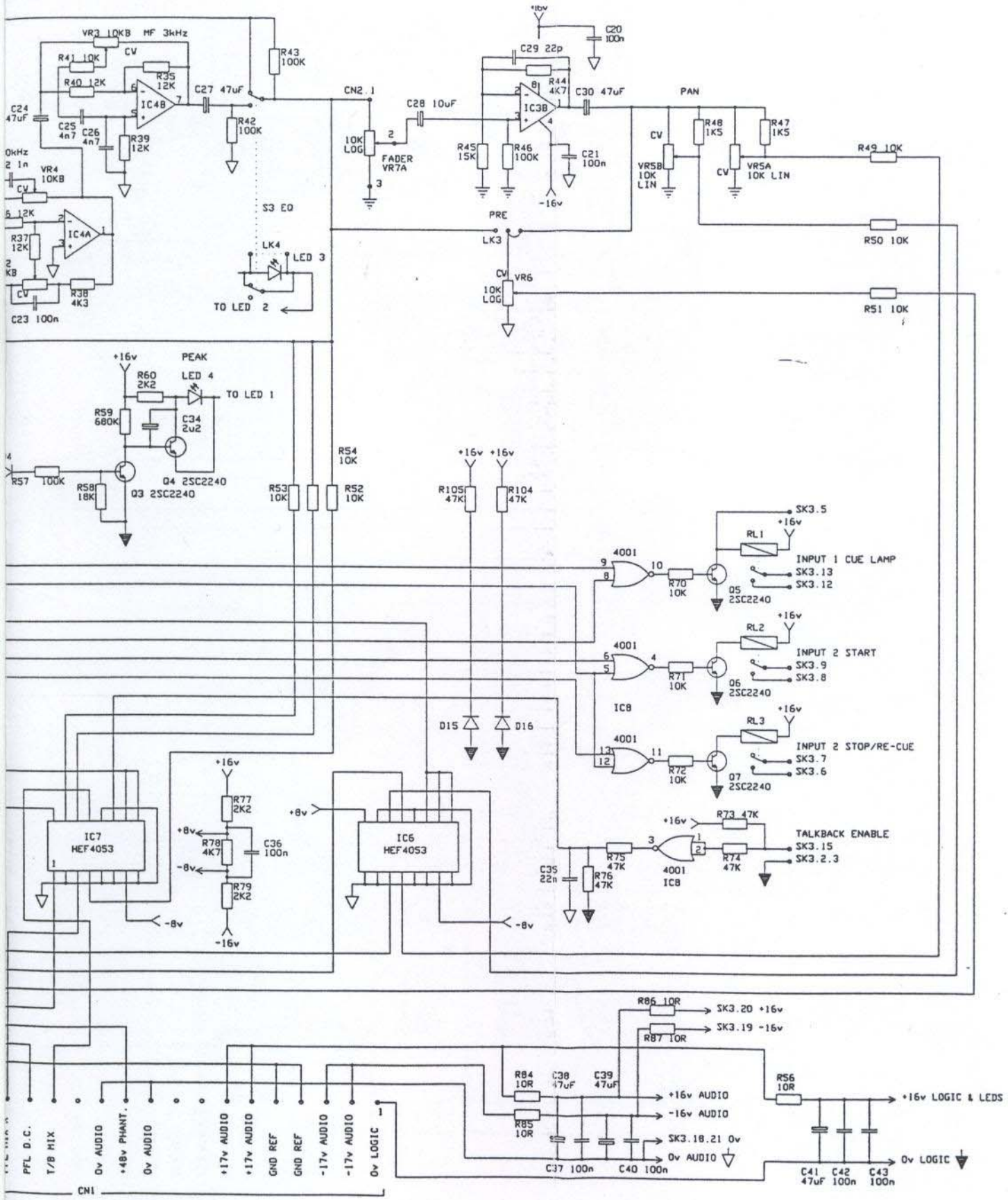
VR3 10KB MF 3kHz
CV
R41 10K
R40 12K
R35 12K
C27 47uF
R43 100K
C24 47uF
C25 4n7
C26 4n7
R39 12K
IC4B
R42 100K
S3 EQ
VR4 10KB
IC4A
R37 12K
R38 4K3
C23 100n
LK4
LED 3
TO LED 2
CN2.1
C28 10uF
10K LOG
FADER VR7A
C29 22p
C20 100n
R44 4K7
C30 47uF
IC3B
R45 15K
R46 100K
C21 100n
-16v
PAN
VR5B 10K LIN
VR5A 10K LIN
R48 1K5
R47 1K5
R49 10K
R50 10K
R51 10K
PRE
LK3
VR6 10K LOG
+16v
PEAK
LED 4
TO LED 1
R60 2K2
R59 680K
C34 2u2
Q4 2SC2240
Q3 2SC2240
R57 100K
R58 18K
R54 10K
R53 10K
R52 10K
R105 47K
R104 47K
SK3.5
RL1
INPUT 1 CUE LAMP
SK3.13
SK3.12
4001
R70 10K
Q5 2SC2240
RL2
INPUT 2 START
SK3.9
SK3.8
R71 10K
Q6 2SC2240
IC8
D15
D16
RL3
INPUT 2 STOP/RE-CUE
SK3.7
SK3.6
R72 10K
Q7 2SC2240
IC7 HEF4053
IC6 HEF4053
R77 2K2
R78 4K7
C36 100n
R79 2K2
+8v
-8v
-16v
R73 47K
TALKBACK ENABLE
SK3.15
SK3.2.3
R74 47K
R75 47K
R76 47K
C35 22n
R86 10R
SK3.20 +16v
R87 10R
SK3.19 -16v
R84 10R
C38 47uF
C39 47uF
R85 10R
+16v AUDIO
-16v AUDIO
SK3.18.21 0v
0v AUDIO
C37 100n
C40 100n
R56 10R
+16v LOGIC & LEDS
0v LOGIC
C41 47uF
C42 100n
C43 100n
PFL D.C.
T/B MIX
0v AUDIO
+48v PHANT.
0v AUDIO
+17v AUDIO
+17v AUDIO
GND REF
GND REF
-17v AUDIO
-17v AUDIO
0v LOGIC
CN1

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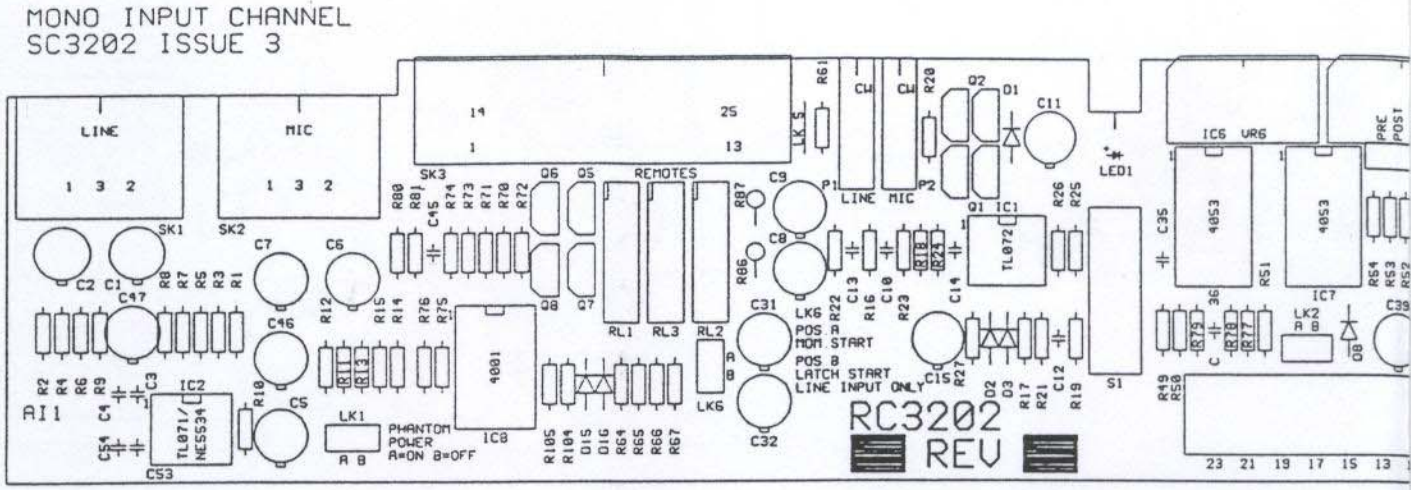
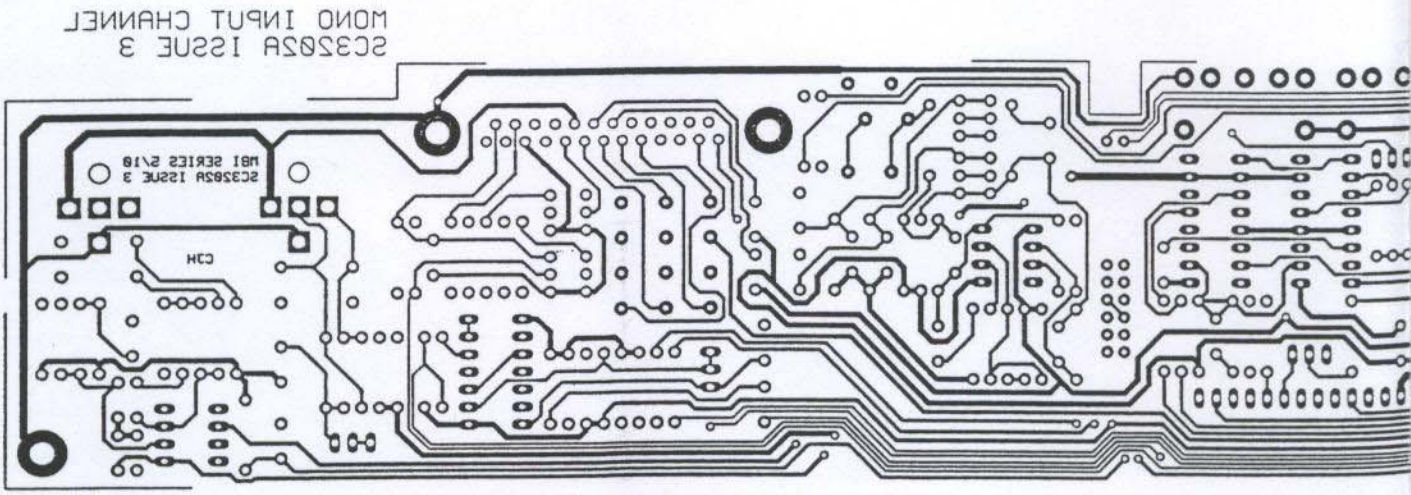
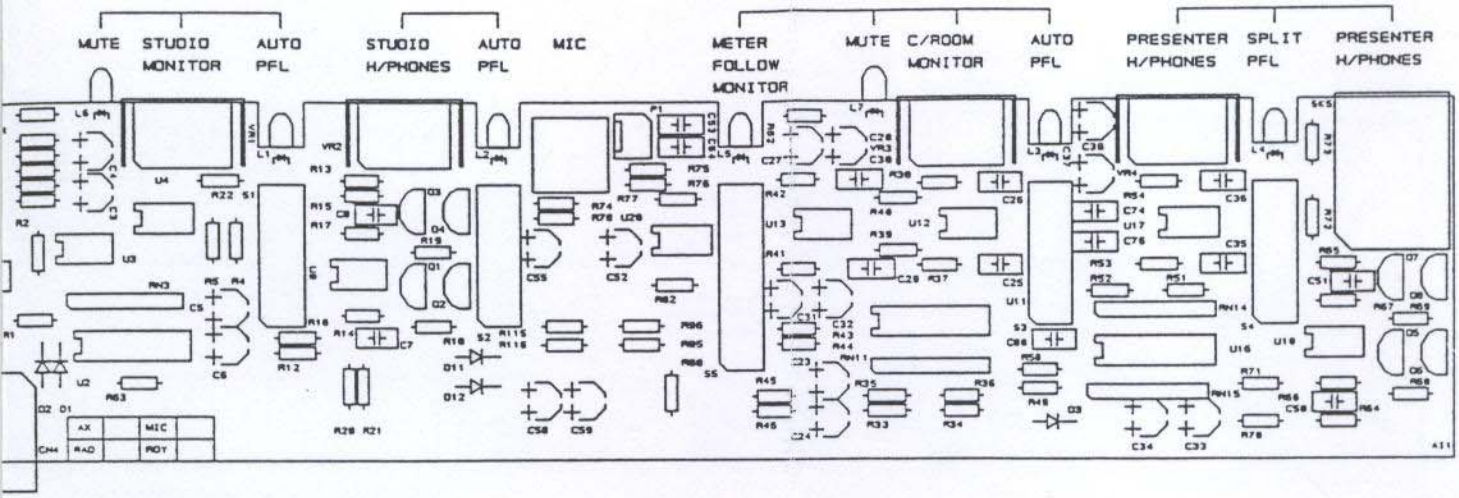
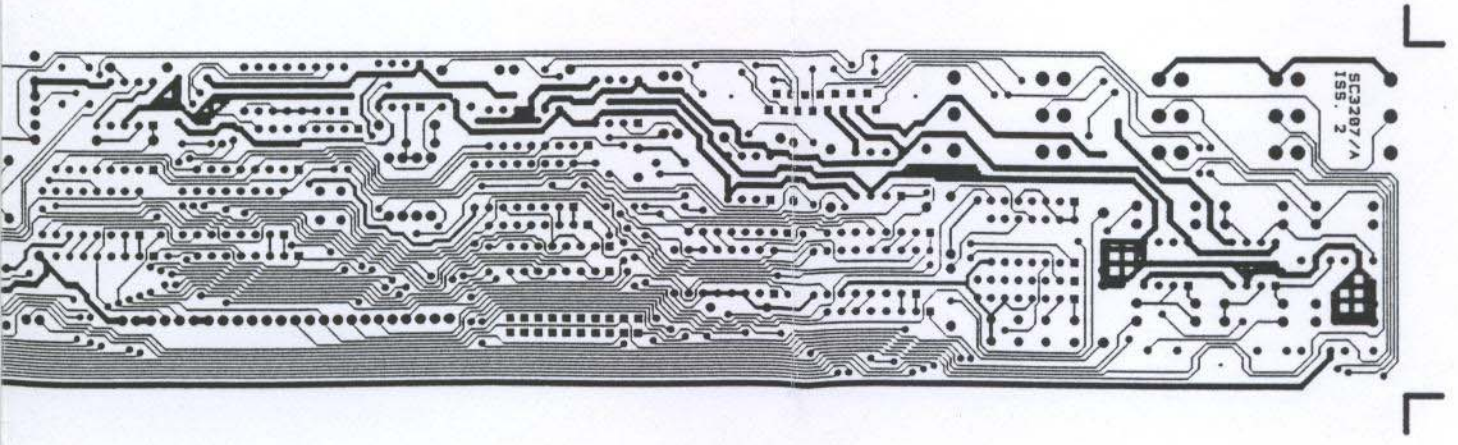





MUTE
STUDIO MONITOR
AUTO PFL
STUDIO H/PHONES
AUTO PFL
MIC
METER FOLLOW MONITOR
MUTE
C/ROOM MONITOR
AUTO PFL
PRESENTER H/PHONES
SPLIT PFL
PRESENTER H/PHONES


SC3207/A
ISS. 2

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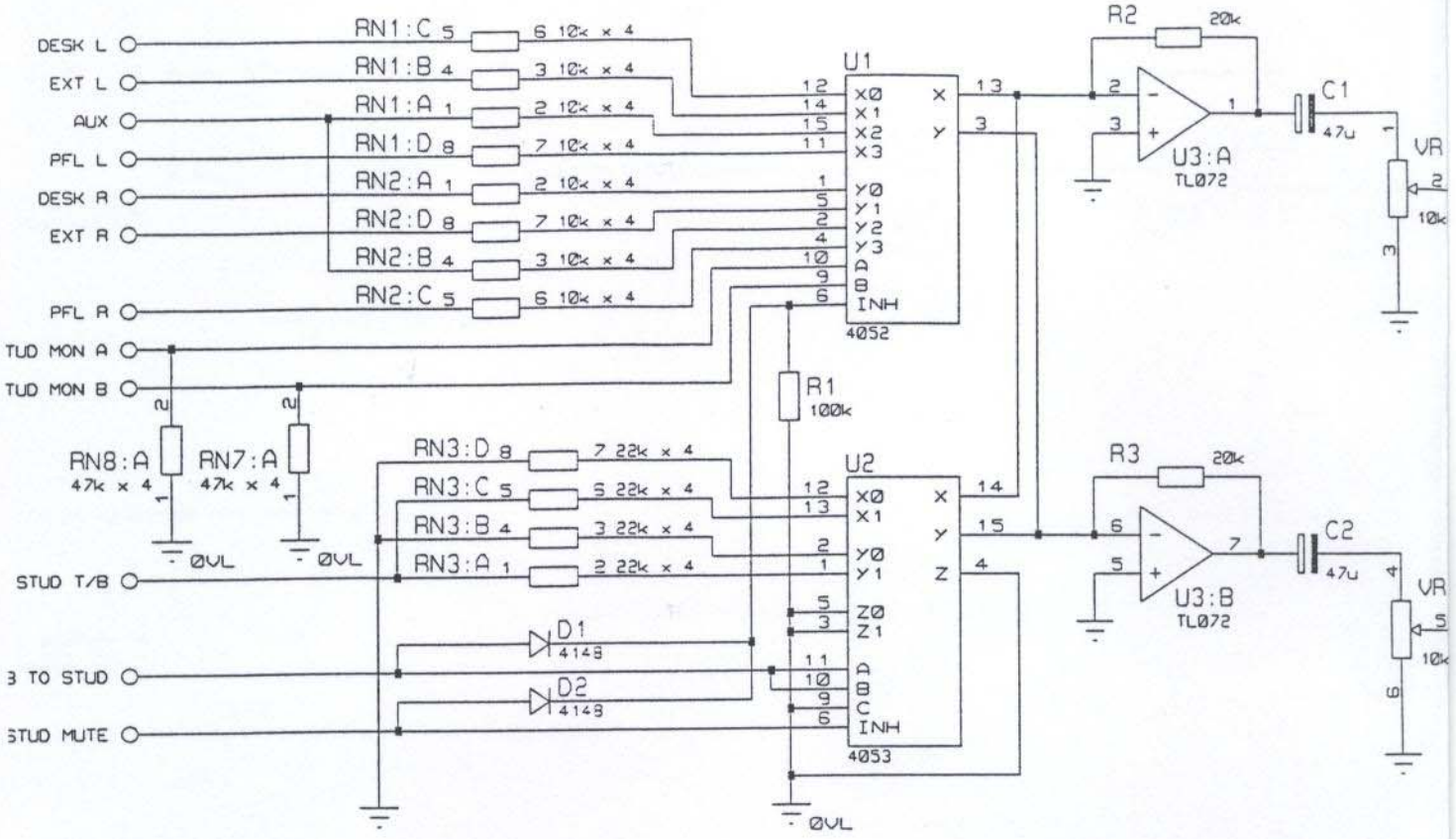
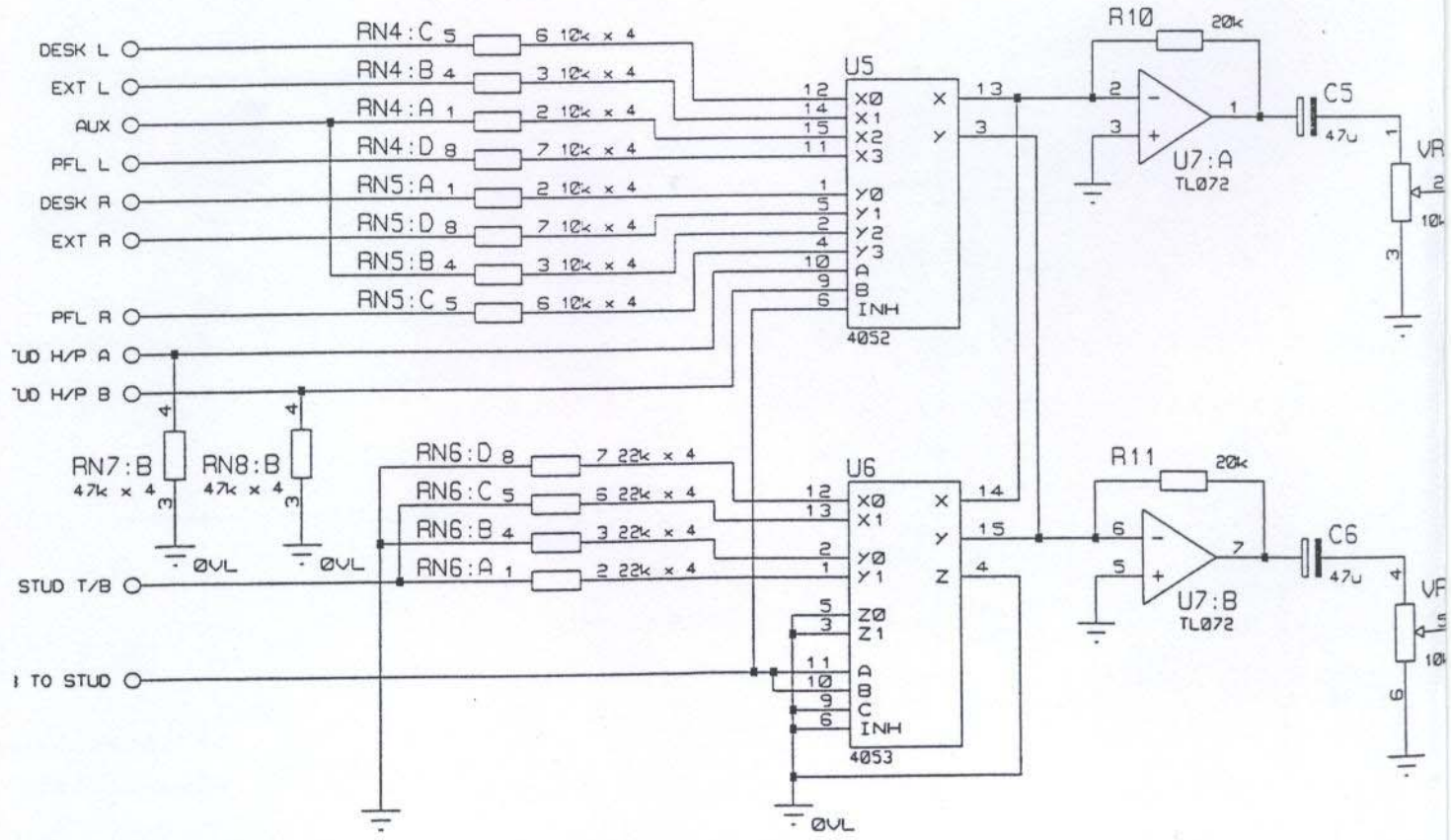
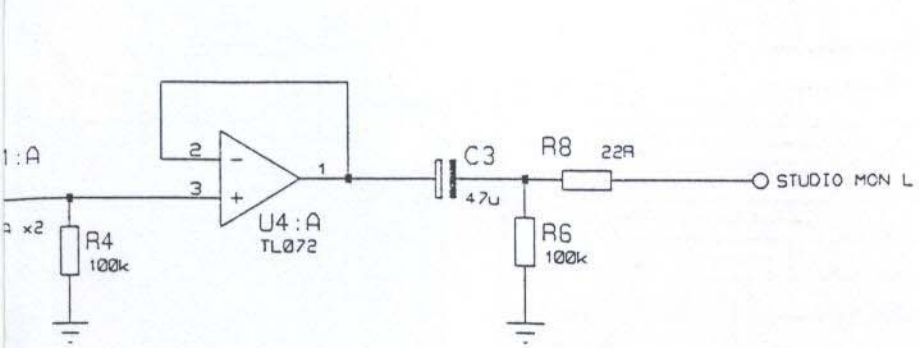
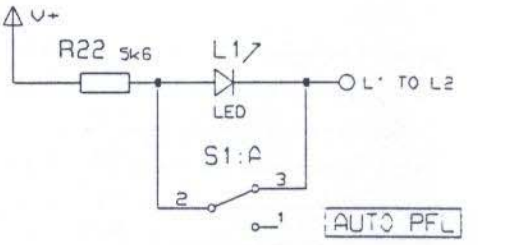
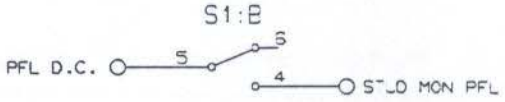
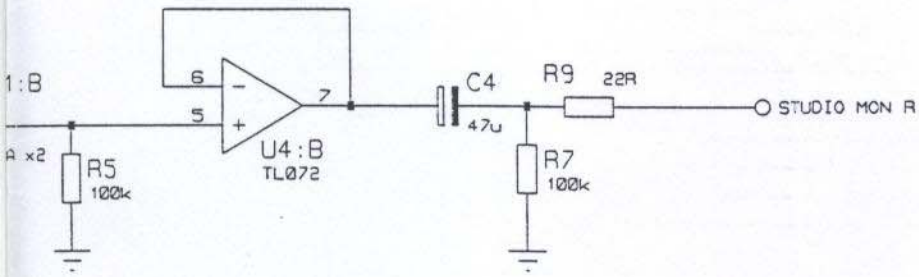


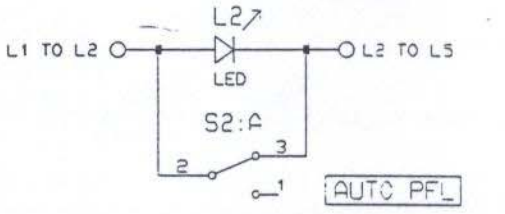


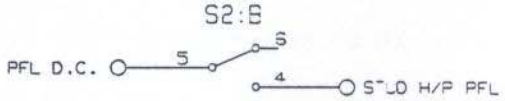

1:A
2
3
1
U4:A
TL072
C3
47u
R8 22R
STUDIO MON L
R4
100k
R6
100k

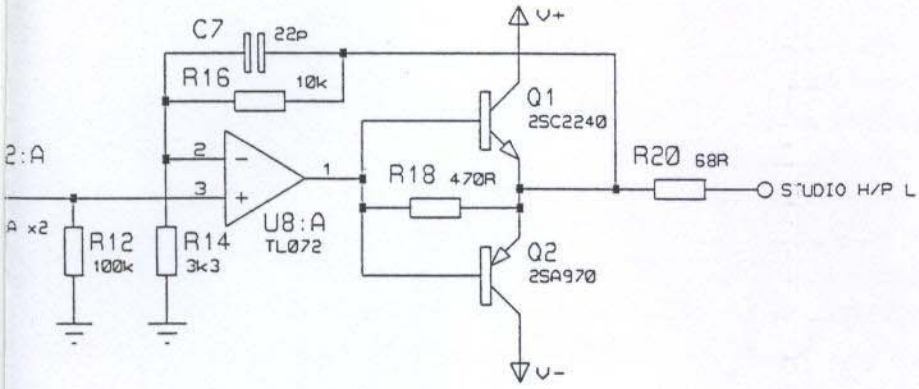

V+
R22 5k6
L1
LED
L' TO L2
S1:A
AUTO PFL

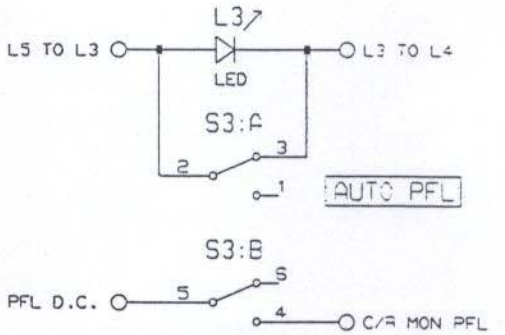

S1:B
PFL D.C.
STUDIO MON PFL


1:B
6
5
7
U4:B
TL072
C4
47u
R9 22R
STUDIO MON R
R5
100k
R7
100k

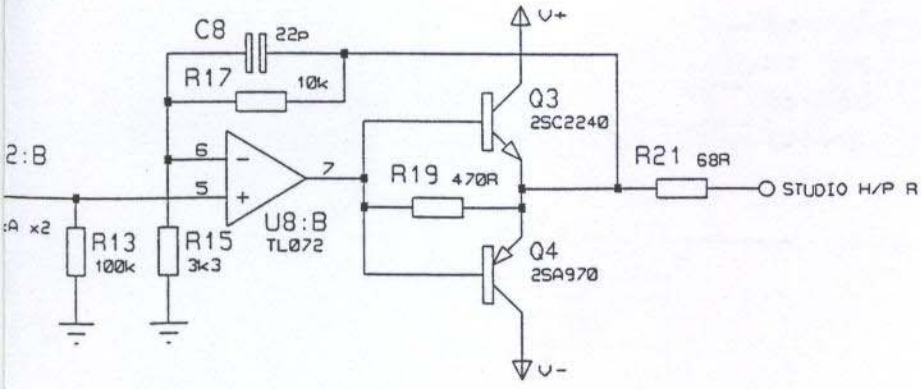

L2
L1 TO L2
LED
L2 TO L5
S2:A
AUTO PFL

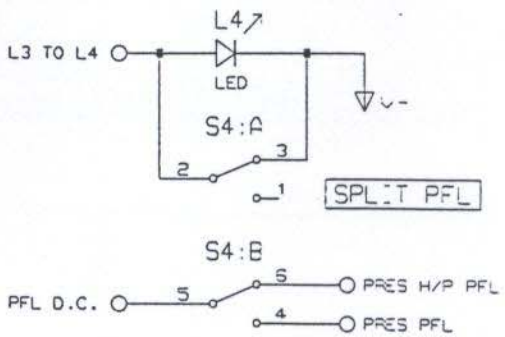

S2:B
PFL D.C.
STUDIO H/P PFL


C7 22p
R16 10k
V+
Q1
2SC2240
2:A
R18 470R
R20 68R
STUDIO H/P L
R12
100k
R14
3k3
U8:A
TL072
Q2
2SA970
V-


L3
L5 TO L3
LED
L3 TO L4
S3:A
AUTO PFL

S3:B
PFL D.C.
C/R MON PFL


C8 22p
R17 10k
V+
Q3
2SC2240
2:B
R19 470R
R21 68R
STUDIO H/P R
R13
100k
R15
3k3
U8:B
TL072
Q4
2SA970
V-


L4
L3 TO L4
LED
V-
S4:A
SPLIT PFL

S4:B
PFL D.C.
PRES H/P PFL
PRES PFL

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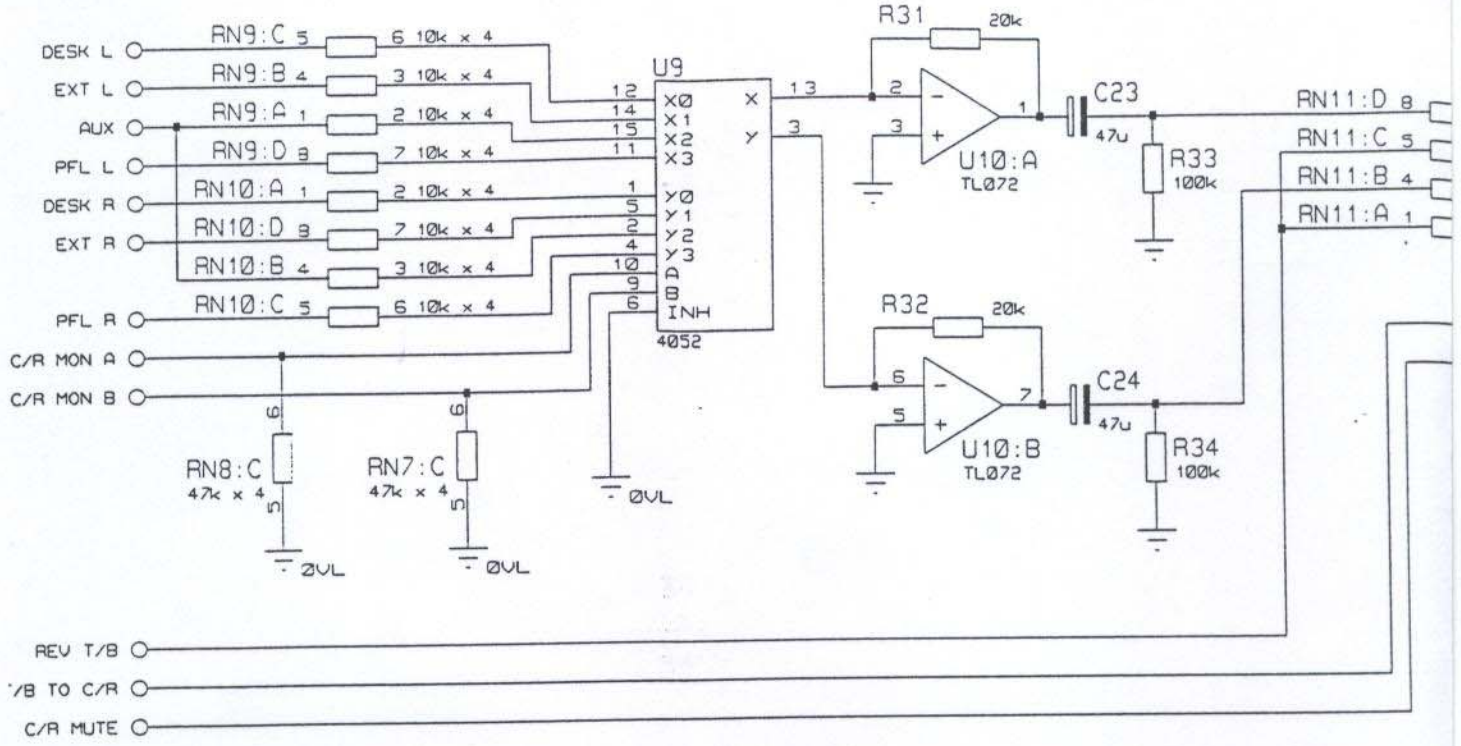
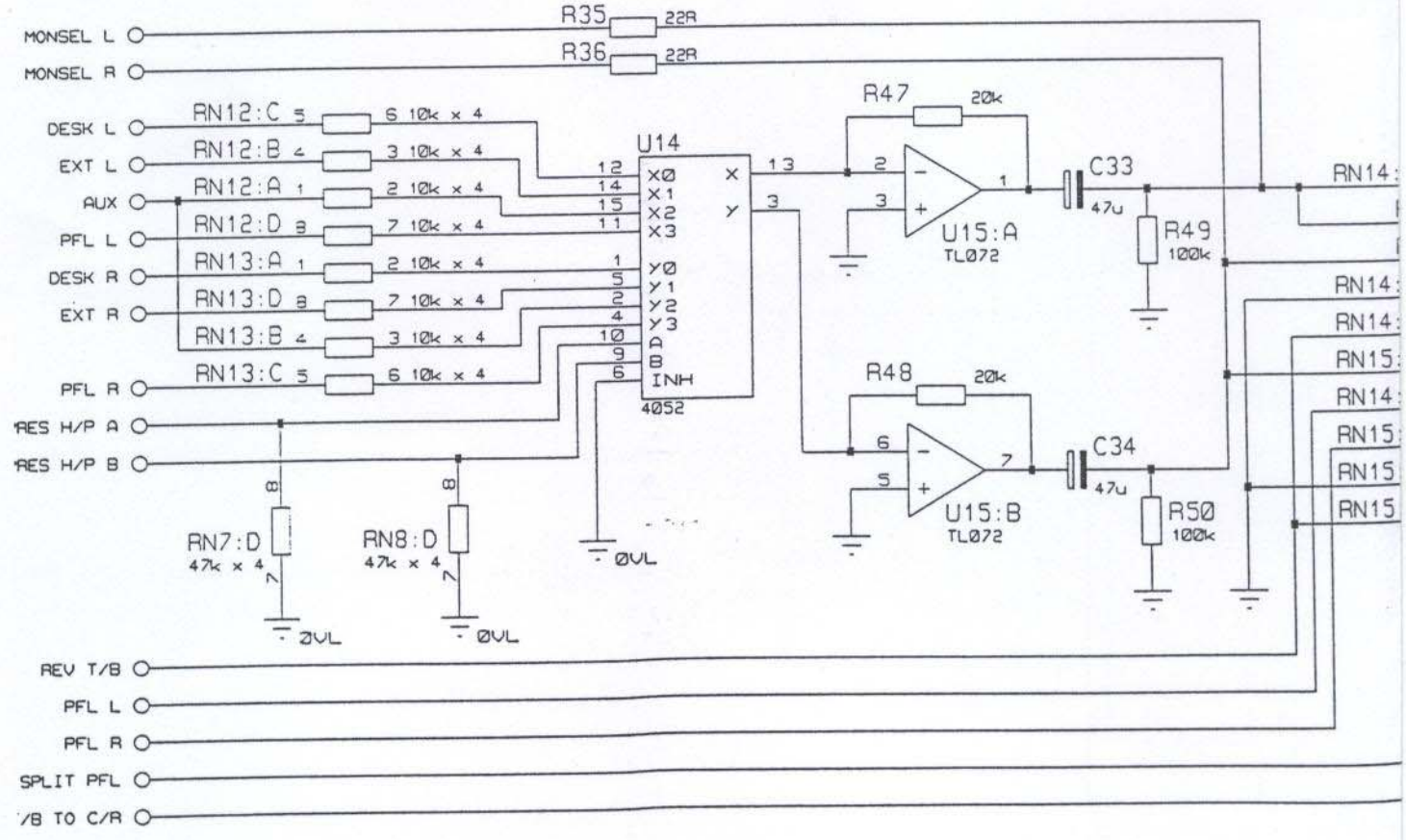
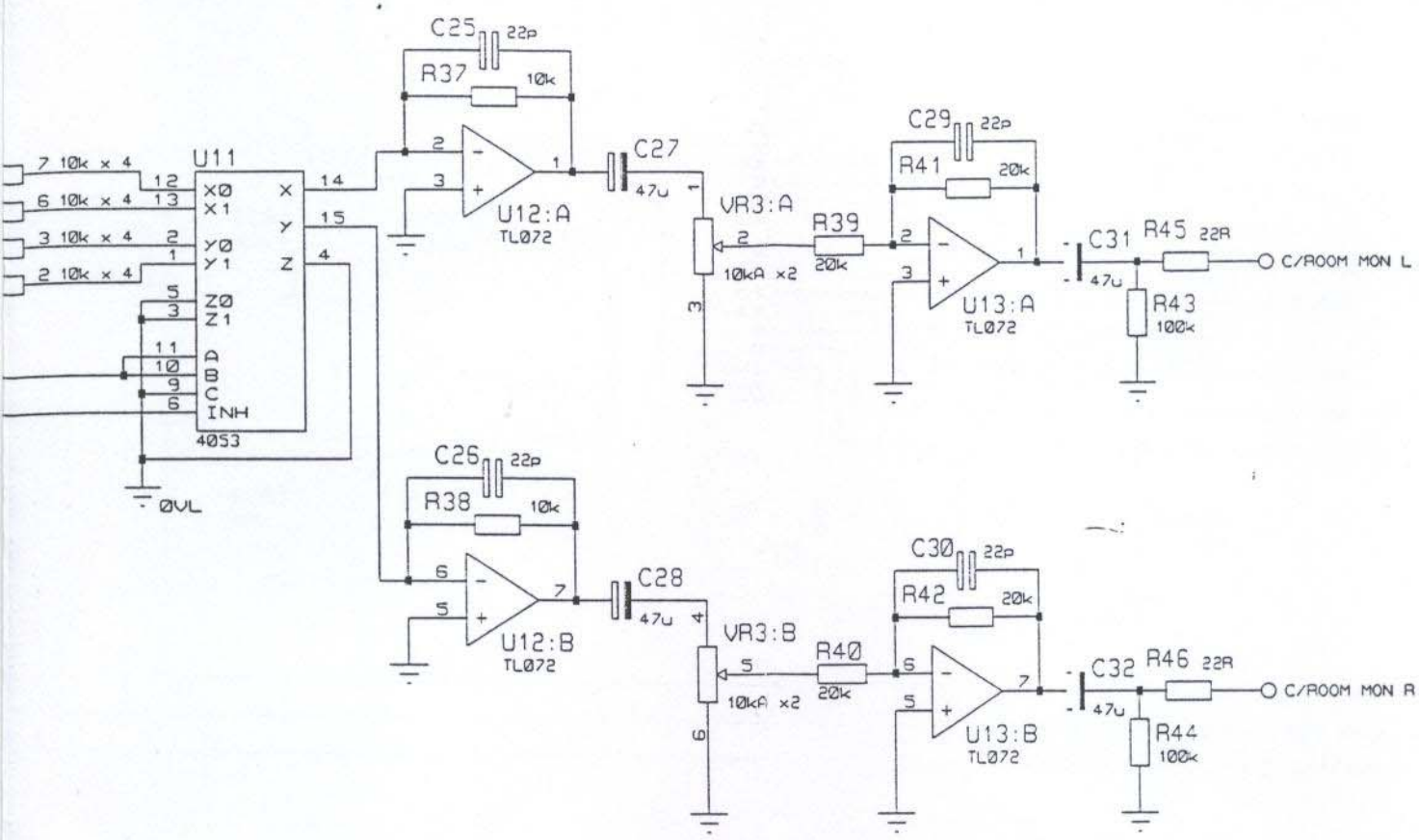
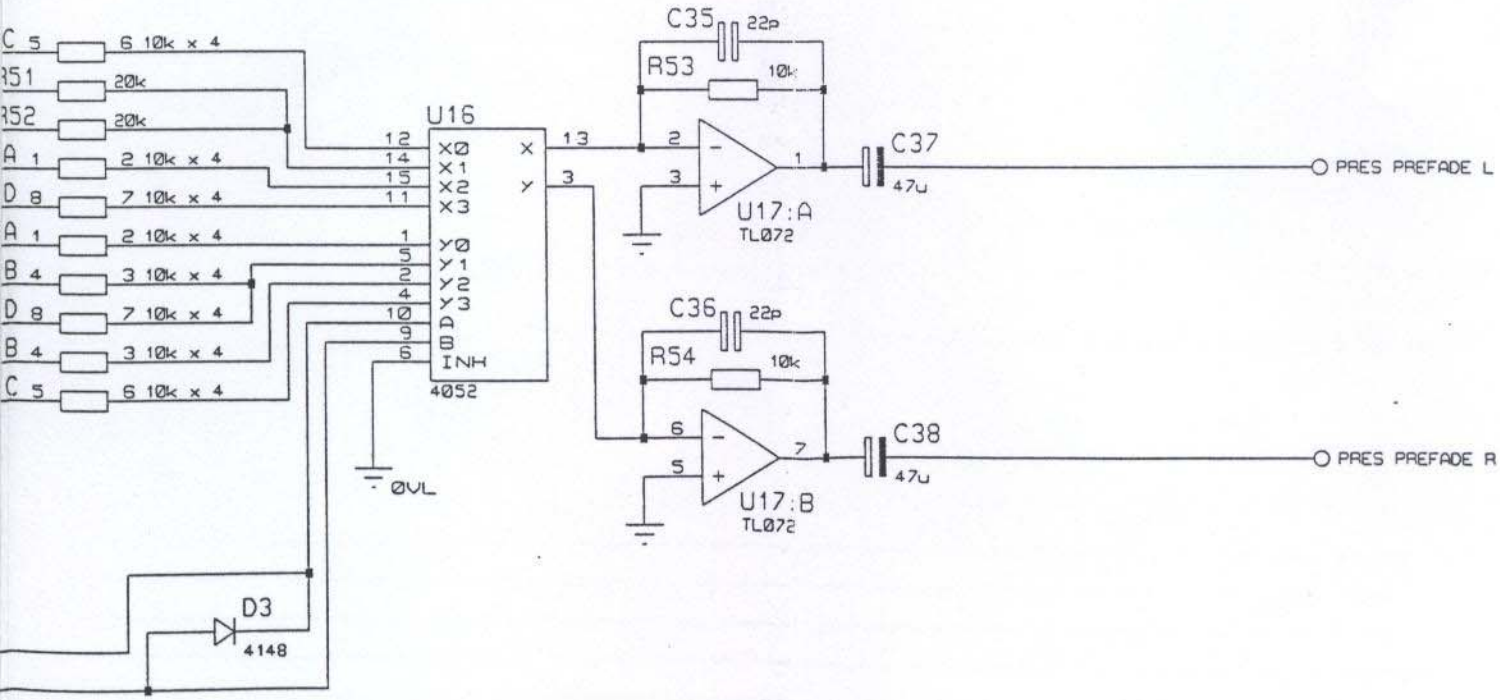





C25 22p
R37 10k
U11
7 10k x 4
6 10k x 4
3 10k x 4
2 10k x 4
X0
X1
Y0
Y1
Z0
Z1
A
B
C
INH
4053
0VL
U12:A
TL072
C27 47u
VR3:A
10kA x2
R39 20k
C29 22p
R41 20k
U13:A
TL072
C31 47u
R45 22R
R43 100k
C/ROOM MON L
C26 22p
R38 10k
U12:B
TL072
C28 47u
VR3:B
10kA x2
R40 20k
C30 22p
R42 20k
U13:B
TL072
C32 47u
R46 22R
R44 100k
C/ROOM MON R


6 10k x 4
20k
20k
2 10k x 4
7 10k x 4
2 10k x 4
3 10k x 4
7 10k x 4
3 10k x 4
6 10k x 4
U16
X0
X1
X2
X3
Y0
Y1
Y2
Y3
A
B
INH
4052
0VL
C35 22p
R53 10k
U17:A
TL072
C37 47u
PRES PREFADE L
C36 22p
R54 10k
U17:B
TL072
C38 47u
PRES PREFADE R
D3
4148

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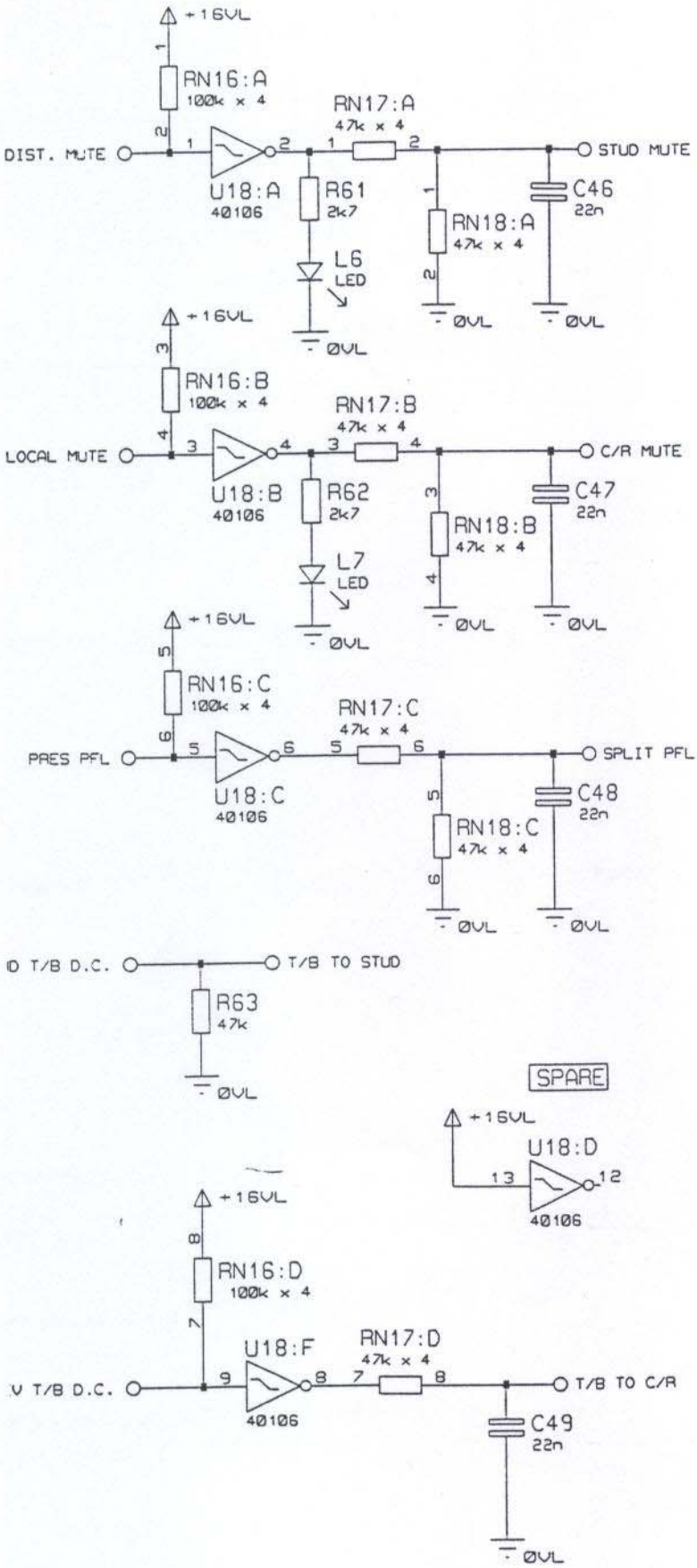

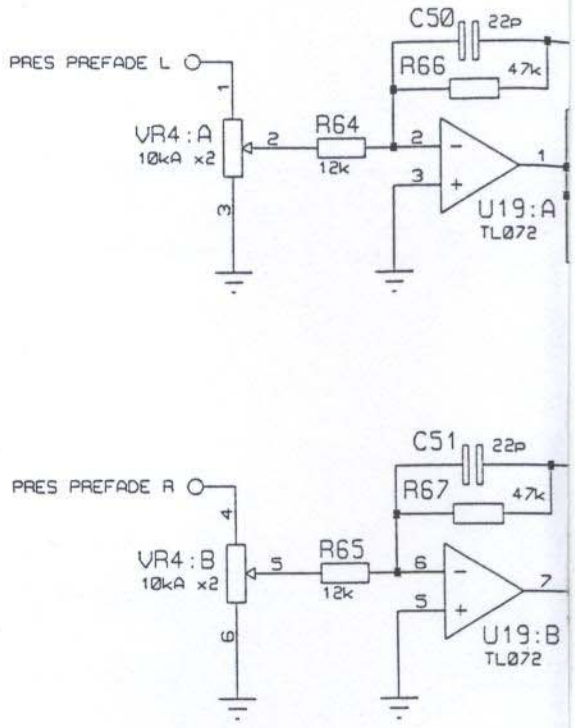

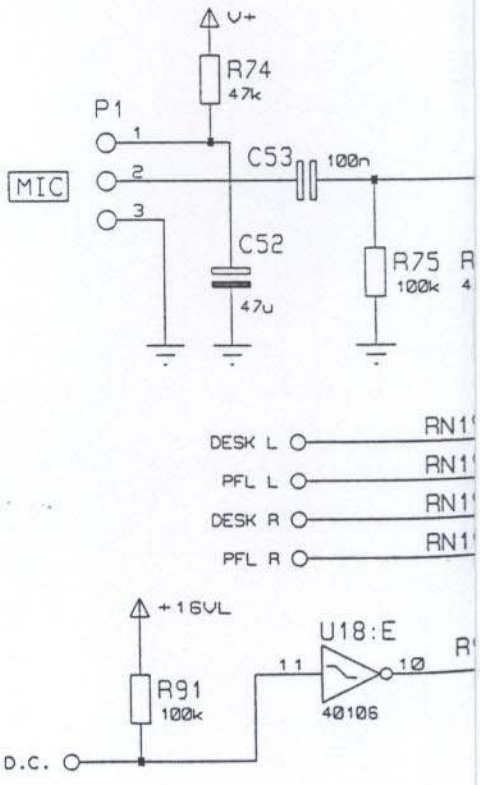

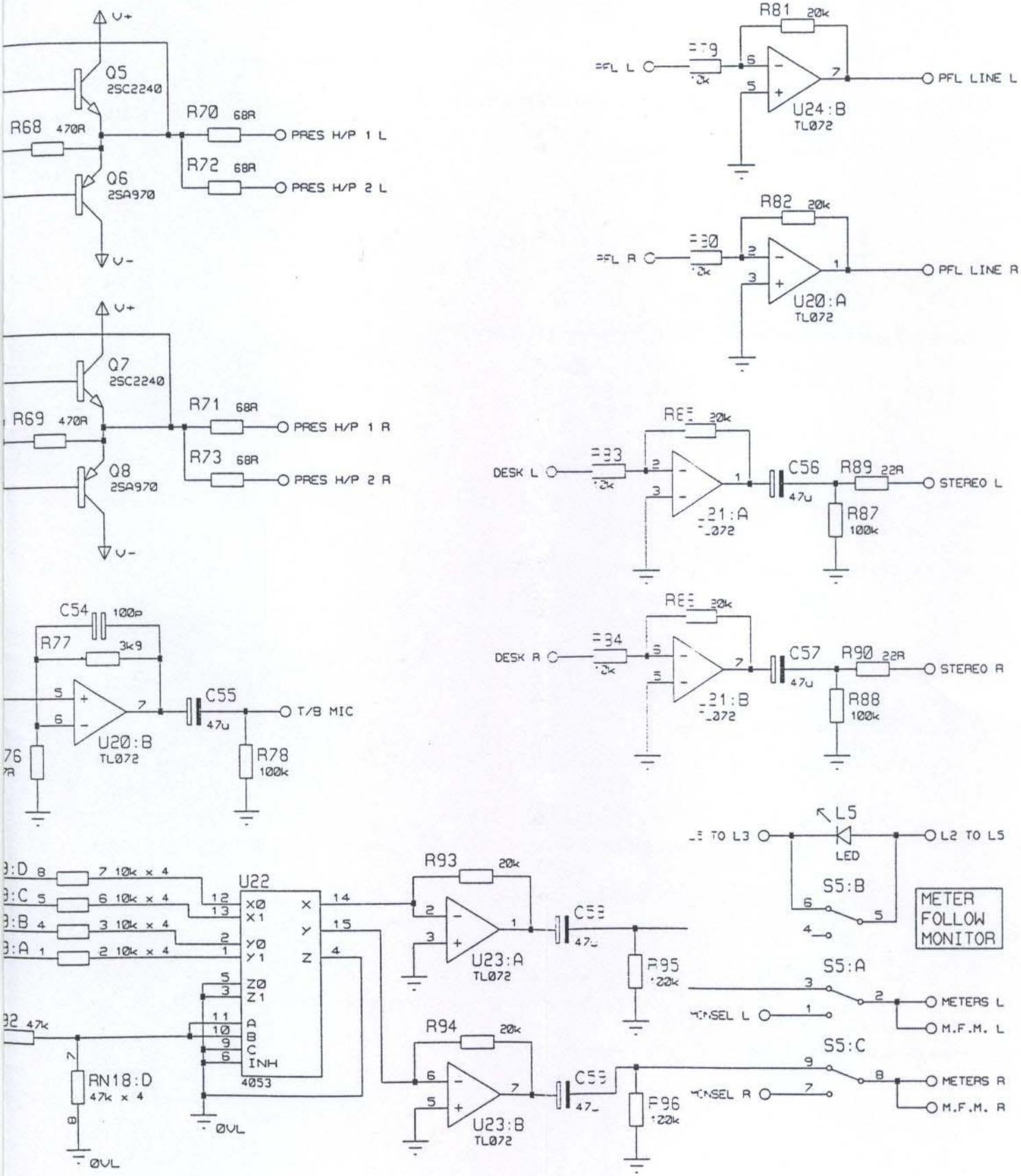
V+
Q5
2SC2240
R68 470R
R70 68R
PRES H/P 1 L
R72 68R
PRES H/P 2 L
Q6
2SA970
V-
V+
Q7
2SC2240
R69 470R
R71 68R
PRES H/P 1 R
R73 68R
PRES H/P 2 R
Q8
2SA970
V-
R81 20k
PFL L
PFL LINE L
U24:B
TL072
R82 20k
PFL R
PFL LINE R
U20:A
TL072
DESK L
C56
R89 22R
STEREO L
47u
R87
100k
U21:A
TL072
DESK R
C57
R90 22R
STEREO R
47u
R88
100k
U21:B
TL072
C54 100p
R77 3k9
C55
T/B MIC
47u
U20:B
TL072
R78
100k
L5
L2 TO L3
L2 TO L5
LED
S5:B
METER
FOLLOW
MONITOR
U22
R93 20k
U23:A
TL072
R94 20k
U23:B
TL072
R95 22k
R96 22k
S5:A
METERS L
M.F.M. L
S5:C
METERS R
M.F.M. R
RN18:D
47k x 4
4053
INH
0VL

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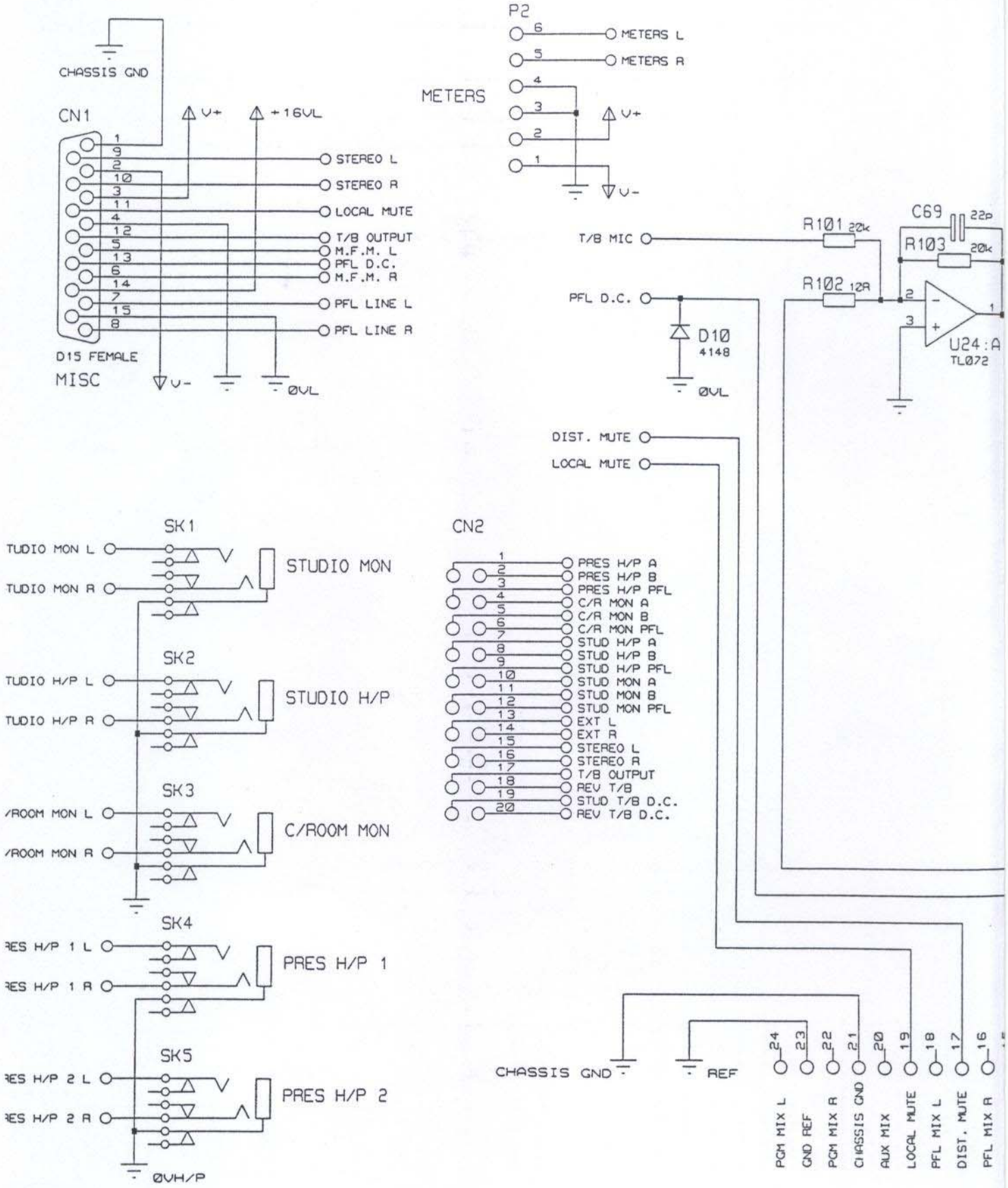

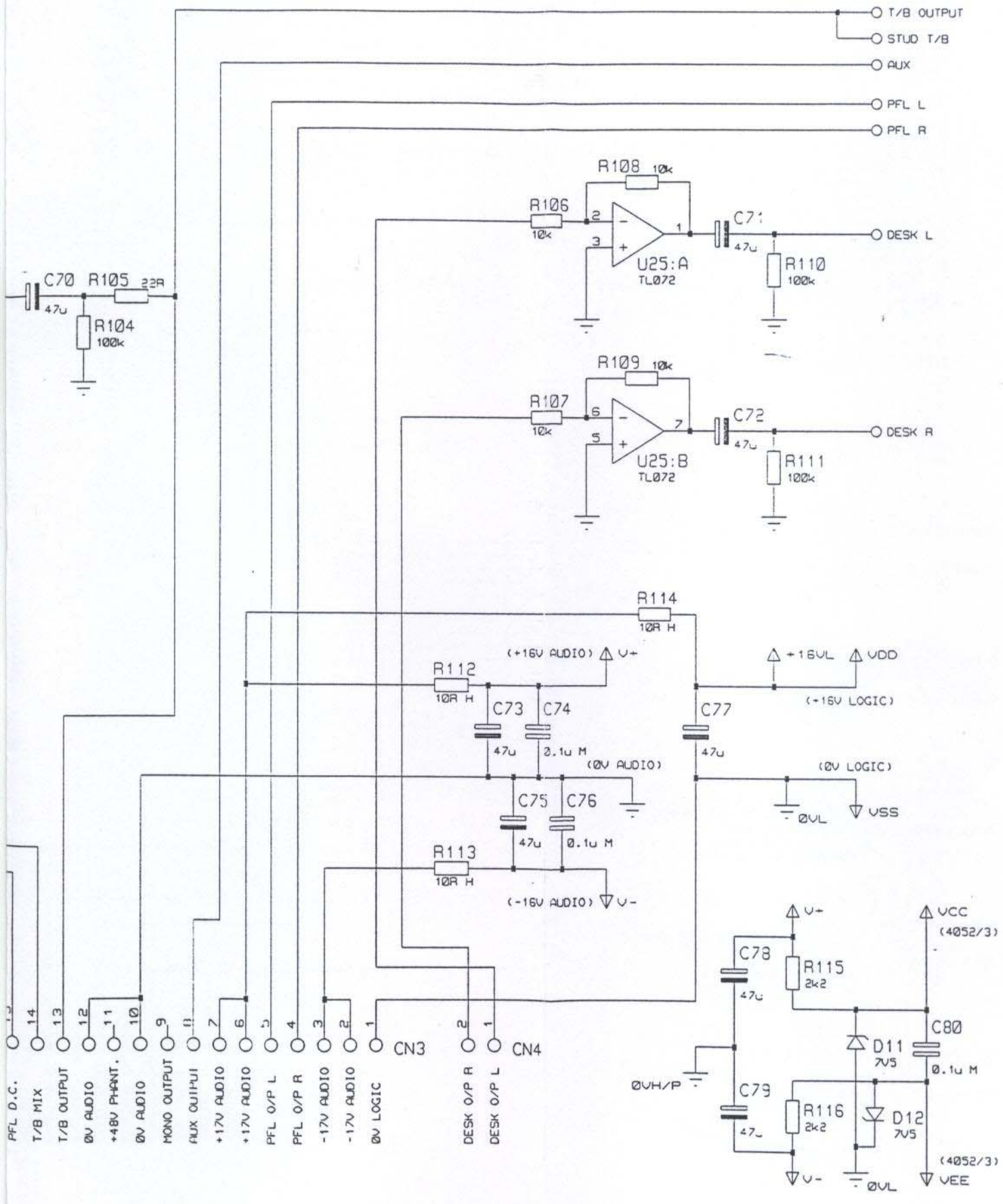
T/B OUTPUT
STUD T/B
AUX
PFL L
PFL R
R108 10k
R106 10k
C71 47u
DESK L
U25:A TL072
R110 100k
C70 47u
R105 22R
R104 100k
R109 10k
R107 10k
C72 47u
DESK R
U25:B TL072
R111 100k
R114 10R H
(+16V AUDIO) V+
R112 10R H
C73 47u
C74 0.1u M
(0V AUDIO)
C77 47u
+16VL
VDD
(+16V LOGIC)
(0V LOGIC)
C75 47u
C76 0.1u M
0VL
VSS
R113 10R H
(-16V AUDIO) V-
CN3
CN4
PFL D.C.
T/B MIX
T/B OUTPUT
0V AUDIO
+48V PHANT.
0V AUDIO
MONO OUTPUT
AUX OUTPUT
+17V AUDIO
+17V AUDIO
PFL O/P L
PFL O/P R
-17V AUDIO
-17V AUDIO
0V LOGIC
DESK O/P R
DESK O/P L
V+
C78 47u
R115 2k2
VCC (4052/3)
C80 0.1u M
D11 7V5
0VH/P
C79 47u
R116 2k2
D12 7V5
V-
0VL
(4052/3) VEE

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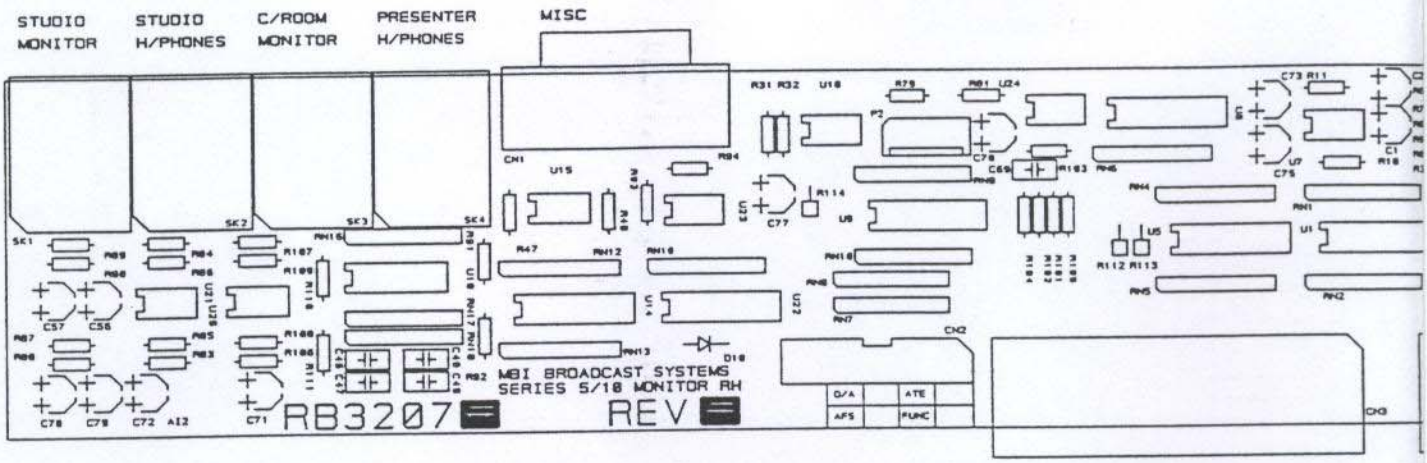

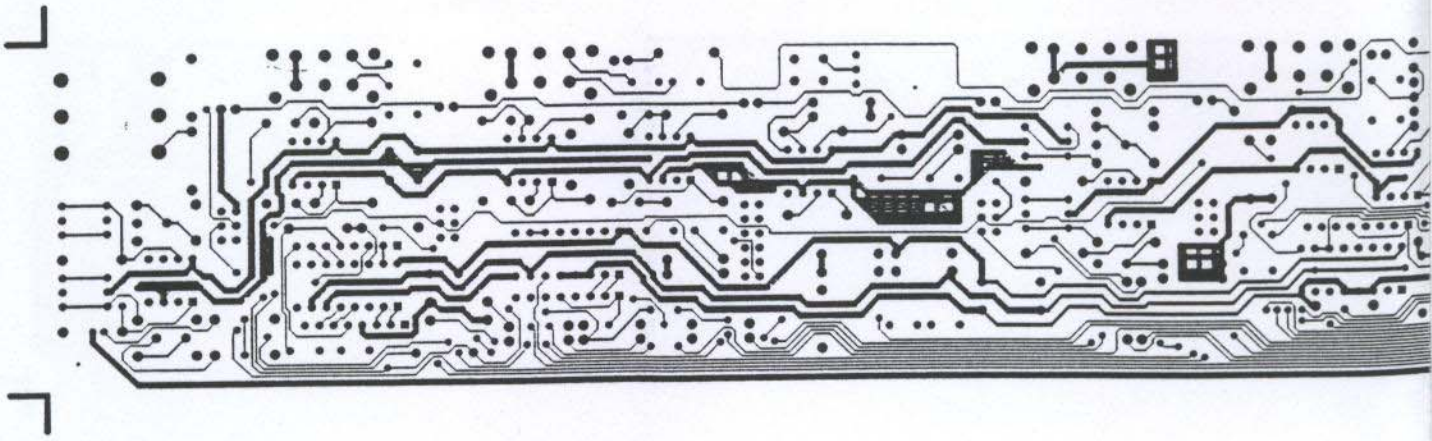

Continuous TB O/P

The connections are

Tip	Signal
Ring + Sleeve	Ground

External Inputs Socket (15-pin D-type male)

The following **balanced** inputs are provided for:

External Input 1 Left+	Pin 2
External Input 1 Left-	Pin 9
External Input 1 Right+	Pin 3
External Input 1 Right-	Pin 10
External Input 2 Left+	Pin 4
External Input 2 Left-	Pin 11
External Input 2 Right+	Pin 5
External Input 2 Right-	Pin 12

The screen for all of these balanced inputs is pin 1.

The following **unbalanced** inputs are provided for:

External Input 3 Left	Pin 7
External Input 3 Right	Pin 8
External Input 4 Left	Pin 14
External Input 4 Right	Pin 15

The 0V for all of these unbalanced inputs is pins 6 and 13.

Misc Socket (15-pin D-type female)

The following table gives the function of each pin in the MISC socket.

Pin 1	Chassis Ground
Pin 2	V- (-16V audio)
Pin 3	V+ (+16V audio)
Pin 4	Ref Ground
Pin 5	MFML (Meter Follows Monitor-Left)
Pin 6	MFMR (Meter Follows Monitor-Right)
Pin 7	PFL Line Left
Pin 8	PFL Line Right
Pin 9	Stereo Left (this is provided from the same source as the Stereo Output Socket)
Pin 10	Stereo Right (this is provided from the same source as the Stereo Output Socket)
Pin 11	Local Mute (logic level signal, 0=local mute is active)
Pin 12	Talkback Output (a direct connection to T/B OUTPUT bus)
Pin 13	PFL Enable (logic level signal, 0=PFL is active)
Pin 14	+16V (Logic)
Pin 15	0V (Logic)

These signals are provided because they may be useful if you wanted to provide additional facilities on your console, e.g a Producer's Unit or external meters.